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Correlations of Race, Ethnicity, and Family Relations on the Developmental Outcomes of Youth Raised in Single Mother Headed Households

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Abstract

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MA, Norfolk State University, 1997

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Dissertation Submitted in Partial Fulfillment of

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Doctor of Philosophy

PhD Human Services – Family Studies & Intervention Strategies

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Abstract

Despite known risk factors associated with families headed by single mothers such as delinquency, substance abuse, and early unprotected sex, researchers have rarely focused on how family relations positively shape the developmental trajectories of youth living in nontraditional families. The purpose of this correlational study was to examine the relationship between the independent variables of ethnicity, parent-child relationship, and family interaction (including the relationship with important non-parental adults) and the dependent variables of developmental outcomes (social and emotional competence) for youth living in families headed by single mothers. The associations were investigated using data collected from the Project on Human Development in Chicago Neighborhoods, a longitudinal cohort study. The relationships between variables were analyzed using a descriptive statistics method. The results of the study indicated no race-related differences in a child's closeness to mother in single-mother families. A significant positive correlation showed a difference in closeness to family members across ethnic groups, by age. Multiple regression analysis was employed to determine if there were statistically significant differences between closeness to the mother or family members, and the outcomes. The findings indicated that closeness to family was positively correlated to emotional outcomes for youth, and a significant positive correlation was found between family interaction and social outcomes. These results may have implications for positive social change by providing public health practitioners with strategies to support positive youth development, altering the future of youth, families, and society which will ultimately benefit from a stronger population of emotionally and socially competent young adults.

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Dedication

This dissertation is dedicated to my Heavenly Father who has given me immeasurable strength and the spirit to persevere throughout this journey. I also dedicate this work to my two children, Miles Hampton Watson, and Mya Sabrina Watson who have given me the room to grow as their mother to achieve this goal. To *my* mother, Beverly Blount, thank you for being the solid rock in my life and for being my biggest fan.

Thank you all for your unconditional love and support.

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I would like to thank my children, mother, grandmother, sister, brother and extended family members for their unconditional love and support. Special thanks to Emanuel for encouraging me to keep going in tough times. I would not have been able to complete this dissertation without your support and encouragement.

Finally, to my Lord and savior, Jesus Christ, I am eternally grateful for the gift of life given by you as a sacrifice. I consider this journey another gift to be used to serve others in the greatest capacity as your disciple.

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Chapter 1: Introduction to the Study

Introduction

Because of changing socioeconomic demographics, the American family structure has changed from the traditional biological two-parent families to multi-blended combinations of nontraditional families (e.g. single-parent families, divorced families, LGBT families), necessitating the study of youth development in a variety of social and familial contexts (Roberts, Lewis, & Carmack, 2011). Positive youth development (PYD) is a construct researchers have used to assess youth development in the context of the family. The goal of PYD is to support youth development by promoting social, moral, emotional, physical, and cognitive growth (Thomas & Joseph, 2013).

However, two major familial shifts that remain understudied in relation to PYD and socioeconomic demographics are single-mother families and the role that important non-parental adults play in relation to PYD. Families headed by single mothers have become one of the largest groups in a growing population of nontraditional families, including single-parent families, divorced families, and LGBT families that have diverged from the traditional husband-wife familial organization (Roberts, et al., 2011). Children born to single mothers have increased from 25% in 1965 to more than 70% in 2014 (Whitaker, Whitaker, & Jackson, 2014). In addition, because of increasing changes to family structures, support networks consisting of important non-parental adults (including extended family members, coaches, mentors, teachers, and neighbors) have become increasingly important to PYD (Bowers, Johnson, Buckingham, Gasca, Warren,

Lerner, & Lerner, 2014). Important non-parental adults can provide crucial financial, social, and emotional support to families and children, especially single-parent families, and have been found to be connected to increased PYD (Bowers et al., 2014).

However, researchers have linked shifts in the American family structure, especially in single-parent households, to social problems, crime, and an increased risk of problem behaviors for children. Additionally, problems with school misconduct, depressive symptoms, and parent-child conflict have also been linked to youths in single-parent households (Crosnoe & Cavanagh, 2010; Nixon, Greene, & Hogan, 2012; Parent, Jones, Forehand, Cuellar, & Shoulberg, 2013; Zeiders, Roosa, & Yun Tein, 2011). Nixon, Greene, and Hogan (2012) observed that previous research on *what is going wrong* with these single-mother families is abundant, however a present understanding of *what is going right* in families headed by single mothers is limited, but necessary to better understand how youth can develop positively in the absence of a second, paternal adult. Families headed by single-parents, especially by single mothers, remain vulnerable to a variety of well-documented risks, such as delinquency, substance abuse, and early unprotected sex (Bronfenbrenner, 2005; Kumpfer et al., 2010; Nixon et al., 2012; Smith-Osborne, 2007). However, researchers have largely ignored the positive aspects of single-mother families and important non-parental adults in relation to PYD and ethnicity (Barajas, 2011; Crosnoe & Cavanagh, 2010). Because of the increasing changes to family structures, the role of important non-parental adults in PYD for single-mother families is crucial, but research linking PYD, socioeconomic demographics, single-mother families, and the role of important non-parental adults is scarce (Bowers et al., 2014; Nixon et al., 2012; Roberts, et al., 2011). Consequently, I designed this

quantitative correlational study to examine the relationship between the independent variables of ethnicity, parent-child relationship, and family interaction (i.e., the role of important non-parental adults), and the dependent variables of developmental outcomes (social and emotional competence) for youth living in families headed by single mothers.

Researchers have used Bronfenbrenner's (1986) ecological theory to examine the complex interactions between children, family, and children's social environments to see how familial and social interactions influence child development (Swick & Williams, 2006). Related to the ecological theory is the relational developmental systems (RDS) metatheory, which was most appropriate for use in this study because it claims that development is influenced by a combination of bidirectional person-context relationships (Overton, 2003). Relational developmental systems is a developmental metatheory that integrates a distinct set of ecological conditions, described by Bronfenbrenner (1986), that exist in the changing context of family structure and socioeconomic situations. The metatheory can also be used to address the influence of single-mother families and the role of important non-parental adults on PYD (Molenaar, 2008; Nesselroade & Molenaar, 2010). *The Handbook of Child Psychology* (2015) references RDS as a theory that addresses all levels of developmental systems, including living processes (biological-physiological), relationship processes (behavioral and social), and physical, ecological, cultural, and historical processes to explain how individual family relations shape the developmental trajectories of youth (Bronfenbrenner & Morris, 2006; Lerner & Benson, 2013; Overton, 2013).

Background

Hal Waddington first introduced the term *developmental system* was introduced in 1952. Begg and Waddington (1952) described the system of development as a process through which "the species (or person) which becomes modified during evolution" resulting in development (p. 154) and explained developmental systems from an epigenetic perspective which asserts that the emergence of those characteristics in the fertilized egg are from causal interactions. Because of Waddington's work, researchers working in contemporary developmental science have explored developmental systems with implications of causation and explanation of genetics (Griffiths & Tabery, 2013).

Developmental science has evolved from a Cartesian-split-mechanistic (nature-nurture) scientific approach that was failing as a conceptual framework for understanding development, into a multidisciplinary field that focuses on a broader understanding of who we are and what we can become by describing, explaining, and optimizing developmental processes (Lerner, 2013; Overton, 2013). In the 21st century, developmental science offers promise to explaining developmental science including cutting-edge approaches like the RDS metatheory (Lerner, 2013). The RDS perspective has been based in current models of PYD, and researchers have used it to explain the mechanisms of correlation (Griffiths & Tabery, 2013) that cause links between an individual to his or her environment (Chand et al., 2013; Kadir et al., 2012; Overton, 2013). These systems also feature the potential for systematic change in an individual based on the relationship between the individual and the changing environment (Overton, 2013).

In the last century, research on adolescent youth has often developed from a deficit perspective (Grall, 2009; Kjellstrand & Harper, 2012). However, in the 1990s, researchers began focusing on new dimensions of youth and development. In the 1990s, the construct known as the positive youth development (PYD) perspective emerged (Benson, 1997; Lerner, 2013), and the social-ecological systems model (Bronfenbrenner, 1986) was also a prominent framework that focused on child development, positioning the family as the immediate environment surrounding the child. Bronfenbrenner's (1986) social-ecological systems model allowed researchers to study the interaction of family dynamics and child development, and provided the basis for understanding individual development in wider social contexts and environments beyond the family (Bronfenbrenner, 1992). Consequently, RDS has evolved as an innovative and cutting-edge framework for understanding development from a multidisciplinary perspective according to Lerner & Benson, 2013. RDS metatheory provides a framework that gives attention to positive changes that occur within relational systems like a person-context structure where positive development can be achieved.

In the 21st century, developmental scientists are particularly concerned with understanding the mechanisms that identify correlations between inputs of the individual and the environment (Griffiths & Tabery, 2013; Lerner & Callina, 2014). To explain the development of youth of various ethnicities, Waters (2007) suggested using the relations between family and child to investigate the mechanisms of the correlation (Griffiths & Tabery, 2013). Social scientists have now begun to recognize substantial differences that exist between African-American families. Thus, less attention has been given to determining causes and adverse effects of single-parent family risk factors, and more

attention has been given to understanding family processes that contribute to PYD in single-parent families (Crosnoe, & Cavanagh, 2010; Murry, Bynum, Brody, Willert, & Stephens, 2001).

Research on African-American families with youth, for example, has neglected cultural considerations that highlight strengths that may positively influence African-American youth (Forehand, Parent, Golub, & Reid, 2015; Jones & Lindal, 2011). Crosnoe and Cavanagh (2010) documented generalized patterns of development in research on single-parent families that did not apply to all family systems. Past research on African-American families with youth, for example, often neglected cultural considerations that highlight strengths that may positively influence African-American youth (Forehand, Parent, Golub, & Reid, 2015; Jones & Lindal, 2011). As a result, multiple disciplines have referred to the importance of "assets" on youth development to explain the development of youth of various ethnicities (Griffiths2 Tabery). Resilience researchers refer to assets as protective factors, or resources. PYD advocates refer to assets as supports and opportunities, and strength-based practitioners refer to assets as family strengths. Apart from the terminology, researchers support these assets as being consistent across cultures and in need of further study (Thomas & Joseph, 2013).

Problem Statement

Significant gaps in the research literature regarding the connections between ethnicity, single-mother families, the role of important non-parental adults, and PYD (Nixon et al., 2012; Whitaker et al., 2014). Most researchers studying single-parent families have focused on low-income families led by never-married, young, single mothers; however, such a focus does not reflect reports from the U.S. Census Bureau, for

example, which state that 80% of single mothers are gainfully employed, and that 75% of single mothers earn above the poverty level (Grall, 2009). Despite the known risk factors to youth development associated with families headed by single mothers, some studies have shown that youth from single-mother families functioned better than expected given their vulnerabilities, but researchers have not adequately explored the positive dimensions of youth development among single-mother families (Taylor, 2010; Whitaker et al., 2014).

Considering the rapidly increasing number of single-mother families in this country and the influence that important non-parental adults play in youth development (Bowers et al., 2014), a need exists to identify existing connections between single-mother families, important non-parental adults, ethnicity, and PYD. Given that adolescence is one of the most critical developmental stage wherein events occur that influence the development of emerging adults (Garmezy, 1991; Roisman, Masten, Coatsworth, & Tellegen, 2004), this was a valuable area in which to expand knowledge of PYD (Whitaker et al., 2014). More research on single-mother families and important non-parental adults among ethnic groups is needed to better understand how youth develop positively in the absence of a second, parental adult among ethnic groups.

Purpose of the Study

The purpose of this quantitative correlational study was to examine the relationship between the independent variables of ethnicity, parent-child relationship, and family interaction (the role of important non-parental adults), and the dependent variables of developmental outcomes (social and emotional competence) for youth living in families headed by single mothers. This study involved use of secondary data from the

Project on Human Development in Chicago Neighborhoods (PHDCN) study. A longitudinal study by Earls, Brooks-Gunn, Raudenbush, Reiss, & Sampson (1995) who originally investigated family structure and youth development during a span of time. Information from my study adds to the scarce literature on the roles that single mothers and important non-parental adults play in the PYD of children living in single-mother headed families, as well as how these roles differ by ethnicity. The results also offer insight into how single-parent families in general, and single-mother families in particular can promote PYD in children by highlighting the correlations between parent-child relationships (mother-child relations) and the roles of important non-parental adults (family-child relations) as measured by levels of closeness and family interaction. Information from this study can be used by practitioners to help single mothers focus on factors that encourage PYD (Bradway, 2011; Kjellstrand & Harper, 2012) and help practitioners understand the connections between ethnicity, single-mother families, the role of important non-parental adults, and PYD.

Research Questions and Hypotheses

I retrieved data from the PHDCN to investigate the relationships between family assets and youth outcomes. In the original PHDCN study, the researchers investigated family structure and youth development from adolescence to early adulthood (Earls, Brooks-Gunn, Raudenbush, Reiss, & Sampson, 1995). Data for the present study was culled data from the Attitudes Towards Mother and Father instrument, the Provisions of Social Relations Scale, the Young Adult Self Report, the Home and Life Interview, and the (HOME) inventory (see Appendix for instrument summaries). I used instrumental data from the PHDCN study to investigate family relationships and youth outcomes

within various single-parent family structures. The following research questions guided this examination of links between family relationships and youth outcomes:

*RQ*1: Are there differences in closeness to the mother in single-parent families, related to race/ethnicity and cohort?

$H_0$1: There are no differences in closeness to mother in single-parent families, related to race/ethnicity and cohort.

H_A1: There are differences in closeness to mother in single-parent families, related to race/ethnicity and cohort.

*RQ*2: Are there differences in closeness to family members in single-parent families, related to race/ethnicity and cohort?

$H_0$2: There are no differences in closeness to family members in single-parent families, related to race/ethnicity and cohort.

H_A2: There are differences in closeness to family members in single-parent families, related to race/ethnicity and cohort.

*RQ*3: Within single-parent families, are emotional outcomes for youth predicted by closeness to the mother and closeness to family members?

$H_0$3: Emotional outcomes for youth are not predicted by closeness to the mother and closeness to family members.

H_A3: Emotional outcomes for youth are predicted by closeness to the mother and closeness to family members.

*RQ*4: Within single-parent families, is there a relationship between family interaction and social outcomes for youth?

$H_0$4: There was no relationship between family interaction and social outcomes

for youth.

H_A4: There was a relationship between family interaction and social outcomes for youth.

$RQ5$: Are there differences in family interaction (i.e., child-parent and child-other family members), related to race/ethnicity and cohort?

H_05: There are no differences in family interaction (i.e., child-parent and child-other family members), related to race/ethnicity and cohort.

H_A5: There are differences in family interaction (i.e., child-parent and child-other family members), related to race/ethnicity and cohort.

Theoretical Framework

The theoretical grounding for this study was the RDS metatheory, which extended from the developmental systems theory and incorporated Bronfenbrenner's (1979) ecological systems approach to human development. According to Lerner (2001), this metatheory integrates all levels of organization in the developmental system, including biological, individual-psychological, physical, ecological, historical-psychological, familial, communal, and cultural (Overton, 1998). RDS offers developmental researchers a framework to describe and explain the changes and differences that occur between the individual and the context over time (Lerner, Agans, DeSouza, & Hersberg, 2014). I used this theory to guide my examination of how integrated relations at different levels in nuclear and extended families help to explain how development occurs at different stages across the lifespan (Lerner, 2006; Overton, 2011).

RDS explains the importance of contextual factors (i.e., the family and social environment) for understanding how families promote effective changes that increase the

potential for positive development among youth (Lerner et al., 2014). RDS provides an evolutionary and ontogenetic approach focusing on how human development evolves from birth to maturity through complex relations between individuals and their changing environments (Lerner et al., 2014). The RDS framework for this study because it provided a context for grounded research regarding what happens in children's developmental experiences within the context of the family and their environment that optimizes youth development (Overton & Lerner, 2012; Overton & Muller, 2012).

The RDS framework focuses on the contributing factors like family relations and environmental factors and patterns that shape the development of an individual (Overton, 2011), and researchers use it to explain how individuals adapt and respond to their changing environments to stay alive. The RDS paradigm provides a structure for explaining how changes in individuals occur within the developmental system over time (e.g., individual-context relation at Time 1, Time 2, etc.), and for measuring subsequent changes in the relationship (Lerner, et al., 2014).

Nature of Study

Researchers have frequently used longitudinal and cross-sectional approaches in developmental research (Campbell, & Stanley, & Gage, 1963). I conducted the present study using a quantitative, non-experimental, correlational design. A correlational design is appropriate when the purpose of the research is to determine (a) if a relationship exists between variables, and (b) the existing magnitude of the relationship (Pagano, 2010). This design allowed me to examine family variables of different ethnicities, and compare them to the levels of emotional and social outcomes of youth raised by single mothers over time. The cross-sectional comparison provided a degree of explanation by

comparing for differences found in youth outcomes across ethnic groups by age.

In keeping with this research design and theoretical framework, I investigated the relationship between the independent variables-race and ethnicity, family interaction, the role of important non-parental adults, and dependent variables developmental outcomes (social and emotional competence) for youth of diverse ethnicities living in single-mother-headed households. An extensive review of the literature on this topic resulted in my finding no analyses of this nature. Thus, secondary data was used from the PHDCN study (Earls et al., 1995) allowed for the investigation of family relationships and youth development from adolescence to early adulthood.

I chose the quantitative strategy for the study to examine the process of reciprocal relations between individuals and context, represented as individual-family and family-individual relations over time (see Overton, 2011). The PHDCN instruments aligned with the conceptual framework of this study. The features of RDS provided the rationale for my choice of the quantitative design (Lerner & Callina, 2014). The statistical models I used for this study may not directly imply causality, and I used the statistical approaches for this study to describe quantitative associations. RDS allows for the statistical concept of interaction to imply a quantitative association between variables. The analysis provides correlational meaning among variables (Overton, 2011). Ronald A. Fisher introduced the concept of variance (ANOVA) to measure difference in genetic and environmental factors. This analysis helped to explain how each difference contributes to the variation in observable characteristics or traits within a population (Fisher, 1918; Griffiths & Tabery, 2013). This method was appropriate to explain how much a child's developmental trajectories are attributed to genes, the environment, and correlations

between them and other variables (Griffiths & Tabery, 2013).

Similar to the function of variance in explaining data, the RDS proposes "mechanisms of correlation." (Waters, 2007). The mechanism of correlation, according to Waters (2007), is the difference maker in the relationship between the individual and the environment that causes change in the individual. If causes or difference makers exist that leads to a variation in the output (developmental outcomes), then all of the difference makers caused the variation (Waters, 2007). Alternatively, if no variation in the output occurs, then the difference maker did not contribute to the given trait in a population. Because RDS was designed to explain which mechanisms of correlation cause links between an individual and his environment, it justified the present study's framework and associated methods used to focus on how family assets such as close relationships and family support contribute to the developmental trajectories of children raised in single-parent families. Although many potential links exist between the input and the output variables, identifying those links is critical to explaining how they make a difference in youth outcomes (Griffiths & Tabery, 2013).

To pursue this line of inquiry, I selected several datasets from the PHDCN study that aligned with the stated purpose of the study. The Provision of Social Relations measures closeness to family members and friends. The Young Adult Self Report (YASR) measures both behavioral and emotional functioning of young adults between the ages of 18 and 30. The (HOME inventory) measures the developmental environment that affects future positive or negative social behavior. Last, the Family Environment Scale (FES) measures several dimensions of the family environment. The PHDCN used a target population of families living in Chicago neighborhoods. These neighborhoods

were chosen to reach diverse citizens (Sampson, 2012). In this study, the samples were from the original PHDCN study, initiated by generating 343 neighborhood clusters representing homogenous groups characterized by the same race/ethnicity, socioeconomic status, family structure, and dwellings (Sampson, Raudenbush, & Ears, 1997). I used the PHDCN study and its unique features, including a diverse representation of families of different races, family types, and different socioeconomic backgrounds. Additionally, the PHDCN study included children followed from birth through early adulthood with a large enough sample to make reasonable estimations of effect sizes for the study.

Definition of Terms

Family interaction: The interaction between youth and family members, as well as between youth and important non-parental adults (Overton, 2011). Family members and friends play important roles in promoting positive development in youth. Family interaction has been linked to a range of developmental outcomes, including social and emotional outcomes (McDonald, Deatrick, Kassam-Adams, & Richmond, 2011).

Important non-parental adult: Those adults who play an integral role in a child's support and development, but who are not their parents. These adults include extended family members (e.g., aunts, uncles, cousins, and grandparents), coaches, mentors, teachers, and neighbors (Bowers et al., 2014).

Parent-child relationship: The interaction between child and primary care-giver (for this study, single mothers); this interaction can be measured in terms of communication and closeness (Thomas & Joseph, 2013). Parent-child interaction can

influence children's development and affect social and emotional behavior (Thomas & Joseph, 2013).

Positive youth development (PYD): A well-known and well-used construct by researchers to examine youth development in relation to social and familial contexts. The goal of PYD is to support youth development and positive outcomes by promoting social, moral, emotional, physical, and cognitive growth (Thomas & Joseph, 2013). Family assets, such as family interaction, parent-child relationships, and the role of important non-parental adults characterize PYD and have shown to increase PYD (Bowers et al., 2014; Chand et al., 2013).

Single-mother family: A family run and managed by a woman who is the mother to the child(ren) of the family in the absence of a cohabitating partner, and who is also the primary provider for the family (Nixon et al., 2012).

Assumptions

Assumptions are the aspects of a study assumed to be true but not verified. I assumed that the dataset I used for this study was accurate. Since I was not in control of collecting the data, another assumption was that the data were entered correctly. In addition, I assumed that I would have access to the data, and that there would be a sufficient number of observances with full and complete data necessary to make connections between variables. I analyzed data from the PHDCN study, which was originally designed to investigate the family structure and youth development of Chicago residents between 1994 and 2002 (Earls, Brooks-Bunn, Raudenbush, & Sampson, 1995). A final assumption was that the variables of interest in the study were represented in the PHDCN study.

Scope and Delimitations

The data analyzed in the study came from PHDCN study, a longitudinal cohort study originally designed to investigate the family structure and youth development of Chicago residents between 1994 and 2002 (Earls, Brooks-Bunn, Raudenbush, & Sampson, 2006). The target population comprised families in neighborhoods located in Chicago chosen because of the stability of neighborhoods and the diversity of Chicago's citizens (Sampson, 2012). The PHDCN sample was initiated by generating 343 neighborhood clusters representing homogenous groups for race/ethnicity, socioeconomic status, family structure, and dwellings (Sampson, et al., 1997). Although the findings may generalize to other populations because of random sampling and the inclusion of a large variety of respondents, findings may also be limited by demographics to some degree because of the particular socioeconomic and racial demographics of Chicago neighborhoods.

Although a large amount of research exists relating to the unique challenges of raising children in single-parent families, a lack of research relates to the positive outcomes that occur in these families (Bradway, 2011; Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002 Evans et al., 2012; McLoyd, 2006). Researchers have primarily taken a deficit approach to researching youth in single-parent families, rather than focusing on finding strengths that produce positive outcomes in nontraditional, single-parent families (Swadener, 2012). I chose the variables because of their alignment with the RDS framework selected for this study.

Limitations

I used a secondary dataset, which limited the selection of potential variables for the study. The dataset encompassed a large amount of related information from the PHDCN assessment, which helped me identify the scales that were appropriate for assessing the variables in this present study (Earls, et al., 1995). My use of a secondary dataset provided me no control of the sampling method; however, the datasets I chose were from a large national study that facilitated the inclusion of a variety of respondents and a generalizable sample.

Significance

The risks to youth from single-mother families are well-documented and include negative effects such as poverty and community violence (Nixon et al., 2012). However, according to McDonald, Deatrick, Kassam-Adams, and Richmond (2011), despite all the challenges and adversities, some youth living in a single-parent family do well and continue on a positive developmental path. Researchers studying PYD have rarely considered factors that promote PYD in single-parent families (Catalano et al., 2002; Evans et al., 2012; McLoyd, 2006). Researchers have primarily researcher youth from households headed by single mothers have been researched primarily from a deficit perspective, with the primary focus on exploring problems rather than strengths (Conger & Conger, 2002; Taylor, Larsen-Rife, Conger, Widaman, & Cutrona, 2010). This deficit perspective has guided research and public policy for decades, costing the United States hundreds of millions of dollars each year for research based on problems and deficits of adolescents (Lerner, 2013; Whitaker, et al., 2014).

This study related to positive social change, as the results offer positive strength-based approaches that could benefit society in general, and American families. The results from this study provide helpful information to community program leaders and practitioners focused on supporting families, child development, and parenting. Associations between family and culturally specific outcomes can aid human service professionals, educators, and others with strategies for leading families and children toward positive outcomes (Kjellstrand & Harper, 2012). Single-parent families would benefit from knowledge that helps them promote and maintain family assets and strength which will lead their children toward more positive developmental trajectories (Evans et al., 2012; Thomas & Joseph, 2013).

According to McDonald et al. (2011), a PYD perspective expands research-based knowledge beyond the potential for problems or the presence of healthy development (Lerner, 2001). The social implications of having a better understanding of how parenting influences optimal child development includes giving youth a continued path toward healthy competent adults (Chand, et al.,2013; Gfroerer, Kern, Curlette, White, & Jonyniene, 2011; Hillaker et al., 2008; Kadir et al., 2012). This study has implications for many professions including mental health professionals, social workers, and educators who work with single-parent families of all ethnicities, and may help them to effectively handle the many complex challenges associated with parenting alone. The results offer insight into how family relationships promote PYD in youth throughout the United States.

Summary

Changing socioeconomic demographics have led to changes in the American family structure from traditional biological two-parent families, to multi-blended combinations of nontraditional families (e.g., single-parent families, divorced families, LGBT families) consequently, these changes necessitate the study of youth development in a variety of social and familial contexts (Roberts, et al. 2011). Still, two major familial shifts remain understudied in relation to families and PYD: single-mother families, and the role of important non-parental adults in PYD. Although researchers have linked shifts in the American family structure, particularly families headed by single mothers, to social problems (Nixon, et al., 2012; Parent, Jones, Forehand, Cuellar, & Shoulberg, 2013; Zeiders, et al. 2011), researchers have also focused less on finding strengths that exist in single-mother families and more on the social problems risk factors associated with these families (Barajas, 2011; Crosnoe & Cavanagh, 2010). Because of changes in the traditional family structure, support networks like extended-kin and important non-parental adults have become increasingly important to PYD, especially among single-parent families (Bowers et al., 2014). It is not known whether ethnicity, family interactions, the role of important non-parental adults, and developmental outcomes are related to single-mother headed households.

In this quantitative correlational study, I examined the relationship between the independent variables of ethnicity, parent-child relationship, and family interaction (the role of important non-parental adults), and the dependent variables of developmental outcomes (social and emotional competence) for youth living in families headed by single mothers. The RDS metatheory provided the theoretical foundation and conceptual

framework for this study. RDS offer explanations for understanding how interactions between children, family, and children's social environments influence development. In the following chapter, I elaborate on existing peer reviewed literature regarding ethnicity, single-mother families, the role of important non-parental adults, and the positive development outcomes for youth. Chapter 2 also includes the literature search strategy and a more detailed discussion of the theoretical framework used for the study. Chapter 2 concludes with a summary and a transition to the methodology in Chapter 3.

Chapter 2: Literature Review

The number of single-mother-headed households has increased drastically during the last few decades (Bowers et al., 2014). Across all races, more than 27.7 million children in the United States currently living in a single-parent family; of these children, 53% are children raised in a home headed by a single woman (American Community Survey Data, 2011; Grall, 2009). Considering the increasing number of single-mother families in America, the need to identify connections between the child and his or her immediate surroundings that positively influence development is critical.

Although conventional wisdom and past research indicate that children who grow up in households without two parents are at an increased risk of poor social, moral, emotional, and cognitive development than those who do not (Crosnoe & Cavanagh, 2010), this does not account for the positive outcomes of children who have been raised in single-parent households. Researchers (Kotchick, Dorsey, & Heller, 2005; Roberts, et al., 2011) have begun to report on positive outcomes for youth raised by single-parents despite the complex challenges single-parents face. However, the influences of single mothers, in particular, on PYD remain underrepresented in the literature (Barajas, 2011; Crosnoe & Cavanagh, 2010). In addition, support networks consisting of important non-parental adults for single-mothers have become increasingly important to PYD (Bowers et al., 2014). Consequently, the purpose of this study was to explore connections between single-mother families, important non-parental adults, and PYD. In Chapter 2, I outline the literature search strategy and theoretical framework that I used for this study, and provide a review of recent literature on RDS, single-mother families, important non-parental adults, and PYD.

Literature Search Strategy

I conducted an extensive review of the literature I retrieved from Soc Index, Psych Info, ProQuest Central, EBSCO articles, Google Scholar, Sociofile, and JStor databases. The following keywords guided the search: *positive youth development, family assets, child development, positive parenting, parent-child relationships, African-American families, single mothers, family structure, developmental assets, families and stress, important non-parental adults, ecological theory, relational developmental systems metatheory,* and *racial socializatio*n.

Theoretical Framework

I used the RDS metatheory as the theoretical framework used for this study. RDS incorporates Bronfenbrenner's (1979) ecological systems approach to human development, and stems from the developmental systems theory (Damon & Lerner, 1998). Unlike past theories on human development that were based on psychogenic or biogenic approaches, RDS approaches human development from a multidisciplinary perspective that includes biological, cultural, and historical variables (Hood, Halpern, Greenberg, & Lerner, 2010). RDS allows researchers to examine how components interact within a system, including components that are biological, individual-psychological, physical, ecological, historical-psychological, familial, communal, and cultural (Lerner, 2001; Overton, 1998). RDS is appropriate for interpreting the connection between dimensions of ethnicity, family relations, the role of important non-parental adults, and PYD. RDS guided me in examining relationships between parent and child, family and child, and family interaction to explain positive youth development and

the connection that these relationships have with youth raised in families headed by single-mothers (Lerner, 2006; Overton, 2011).

The core concepts of the RDS metatheory are relational systems, action, and embodiment (Lerner & Benson, 2013). A relational system is defined as a system that functions as a whole because of the interdependence of each of its parts (Overton, 2003). Muller and Overton (2012) defined the action as the process of any complex adaptive organizing system (i.e., meaningful, intentional activity between person-context). Embodiment is the final core concept of RDS (Overton, 2006). Embodiment pertains to any acts between the person, biology, and culture; it is the lived experiences of an individual that interacts with the world around them that bridges meaning from relations (Lerner & Benson, 2013; Taylor & Roberts, 1995). Andersen and Chen (2002) referred to embodiment as an individual's portfolio of unique experiences in relation to significant others. The conceptual focus of RDS is based on influential relations between the developing individual and the context of their complicated changing ecology (i.e., individual-context, context-individual).

Furthermore, RDS holds that contextual factors such as family and environment can be integrated into one explanatory framework for a more complete understanding of how families and environment can influence the potential for positive development among youth (Lerner et al., 2014). RDS provides an evolutionary and ontogenetic approach focusing on how individuals develop through influential relations within complex, changing environments (Lerner et al., 2014). RDS helps to explain how children's relational experiences with family and their environment influence their development (Overton & Lerner, 2012; Overton & Muller, 2012).

RDS was appropriate for this study because, according to Lerner, Johnson, and Buckingham (2015), it emphasizes the nature of beneficial, reciprocating relations between the developing individuals and the context of his or her interrelated and changing environments (i.e., the individual-context relationship). Benson (2008) suggested that the RDS five core presuppositions include (a) all youth are capable of growth and development, (b) a positive development trajectory is possible with nurturing relationships, (c) positive development can be promoted when young people have multiple relationships that nurture their development, (d) youth benefit from supportive relationships and strategies promoting supportive engagement, and (e) family, community, neighborhoods, and individuals can all contribute to PYD. In RDS, *family interaction* refers to family time, shared activities, and family rituals (Moore, Madison-Colmore, & Smith, 2003; Zaborskis, Zemaitiene, Borup, Kuntsche, & Moreno, 2007), and is contextually situated in a reciprocal bidirectional relationship (i.e., individual-context and context-individual; Overton & Lerner, 2012). Activities related to family interaction are shown to produce more cooperative behavior, increased social competence, and self-regulation among youth leading to PYD (Arshat, Baharudin, Juhari, & Talib, 2009; Fulkerson, et al., 2010). Because the parent-child relationship is a strong predictor of adolescent well-being and positive development (Thomas & Joseph, 2013), I used the parent-child relationship to measure single mothers' connection to PYD. In addition, because important non-parental adults often function as family members in the absence of actual family members (Bowers et al., 2014), I used family interaction to measure the connection between important non-parental adults and PYD.

Recent Studies Using RDS

In a recent study regarding the relationship between entrepreneurship and environment, Geldhof, Agans, Mueller, and Lerner (2014) used RDS to examine if the relationship between personal characteristics and the likelihood of a group of college students' selection of entrepreneurial careers. The authors found that self-regulation, innovation, and having role models who were entrepreneurs predicted students' career intent (Geldhof, Agans, Mueller, & Lerner, 2014). The use of the RDS guided Geldhof et al.'s focus on the role of the person and context for promoting entrepreneurship development, and they used it to emphasize the interplay between the person and the context in predicting outcomes. Similarly, I examined RDS and the influential relationships between the person (child) and the context (single-mother families, important non-parental adults, and ethnicity) for predicting social and emotional developmental outcomes (PYD).

Zarrett, Fay, Carrano, Li, Phelphs, and Lerner (2009) used RDS to examine youth who participated in athletics (team sports or individual sports) and developmental programs jointly. They used RDS to describe differences rather than correlations in the relationships and skills that youth gain in individual and team sports. For Zarrett et al., RDS provided an in-depth understanding of youth development through analysis of reciprocating influential exchanges between individuals and their contextual relations. Using RDS, researchers aim to reduce a complex experience to a more holistic one by emphasizing the interrelation of influences that contributes to development (Overton, 2011). Zarrett et al.'s (2009) study was important for showing that RDS was applicable for comparing and contrasting the characteristics of ethnicity among different families.

Focusing on ethnicity and family attributes are most often referenced in the literature as the context in which family processes need to be explored (Evans et al., 2012).

Fuller-Iglesias, Webster, and Antonucci (2015) sampled 881 adults (72% White and 26% Black) from the longitudinal Social Relations, Age, and Health Study (2011) to explore whether family structure variations (i.e., composition and size) and negative quality family support interactively or differentially influenced psychological well-being among young, middle-aged, and older adults over a span of time. The objectives of the study were (a) to examine how close family support system structure and negative family relationships influenced psychological well-being among young, middle-aged, and older adults; and (b) to determine if these two variables (family support system structure and family negativity) interact to predict changes in well-being (Fuller-Iglesias et al., 2015). The authors measured the participants' age, close family support network structure, perceived family negativity, depressive symptoms, and demographic controls. The data were analyzed using structural equation modeling to simultaneously estimate multiple equations by testing causal effects between variables with a two-wave effects model. The researchers found that close family support was not associated with changes in the well-being of young adults, but family support was associated to well-being in older adults (Fuller-Iglesias et al., 2015). Findings for increased family size were similar. Additionally, changes in family negativity were associated with depressive symptoms among young adults, but not older adults. Contrary to the authors' hypothesis, family negativity was associated with increased depressive symptoms in young adults.

Although Fuller-Iglesias et al. (2015) did not utilize the RDS to explore development between individuals and contextual factors, I used this study in my literature

review (a) because the variables they studied were similar to the ones in my study, and (b) to further show cause for my use of RDS in this study. Fuller-Iglesias et al.'s findings did not establish directionality of the associations between strengths and interactions of the variables studied, and indicated that future studies explore similar research questions to show the strength of associations and interactions for which RDS is applicable. The RDS approach uses a statistical concept for interactions to imply a quantitative association between variables. The analysis used in the Fuller-Iglesias study provided meaning for elucidating how variables interact with other variables (Overton, 2011).

According to Lerner, Agans, DeSouza, and Gasca. (2013), models based on RDS allow for the advancement of theory and research within developmental science. RDS-based models help explain the connection between persons and their environment (Overton, 2011), and are driven by the significance of diversity (Lerner et al., 2013). RDS was beneficial to my study because I focused on the relationship between child development, single-mother families, important non-parental adults, and ethnicity (Kotchick, Dorsey, & Heller, 2005; Luthar & Zelazo, 2003). With RDS, the function of one variable is developmentally regulated by the function of other variables. This means that the individual (e.g., the child) and his or her context (e.g., parent-child relationship and family interaction) become the basic unit of analysis within the developmental system.

According to Lerner et al. (2014), any variable (e.g., family relations) from any level (e.g., cultural) is embodied in or joined with variables from all other levels. RDS allows for understanding the developmental changes that occur in children living in single-mother families. While I was exploring links between the influential relationships

of the child and her or his family, my use of RDS offered insight into these relationships by serving as a framework for analyzing and describing how they influence a child's developmental trajectory. RDS helps explain relationships between individuals and their contexts that produce developmental attributes over time (Overton, 2011). Consequently, RDS may also help to explain the relationship between single-mother families, important non-parental adults, ethnicity, and PYD.

Single-Mother Families and Ethnicity

Equal to the growing trend of ethnic minority youth living in single-parent households is the notable interest in adjustment difficulties of ethnic minority youth from diverse families (Whitaker et al., 2014). RDS approach was equipped to address the connections between ethnicity, family structure, and child development. Many of the studies on single mothers have been based on a cultural deficit model, which have focused primarily on the negative impacts of families headed by single mothers living in poverty (Grall, 2009; Kjellstrand & Harper, 2012; Nixon et al., 2012). However, the parent-child relationship and family interaction can enrich youth development and lead to positive outcomes in ethnic minority youth (Evans et. al, 2012; Nixon et al., 2012; Roberts et al., 2011). Taylor, Larsen-Rife, Conger, Widaman, and Cutrona (2010) noted that critical protective factors found in African American families, for example, may reduce the chance of risks associated with negative circumstances linked to negative developmental outcomes for adolescents (Garcia et al., 1996; Taylor, 2010). Research pertaining to families led by single mothers can provide information lacking in the literature to uncover positive developmental outcomes among youth reared by single mothers of different ethnicities (Kjellstrand & Harper, 2012). A close relationship with a

caring parent, as well as a supportive family network and family interaction are factors that have contributed to PYD despite adversity (Moilanen, Shaw, & Fitzpatrick, 2009; Smith-Osborne, 2007).

Researchers have well-documented generalized patterns in family research that do not apply within all family systems (Barrett & Turner, 2005; Crosnoe & Cavanagh, 2010; Jones, Zalot, Foster, Sterret, & Chester, 2007). However, there has not enough research to suggest how positive functioning from high-risk families produce positive functioning, particularly for single-parents (Parent et al., 2013). Historically, ethnic minority families headed by single-parents have been compared to White families, and researchers have not adequately considered the influence of single-mother families of different ethnicities on PYD (Whitaker et al., 2014). As highlighted in case studies by Crosnoe and Cavanagh (2010), family researchers have moved towards explaining why processes matter to different family systems. According to Crosnoe and Cavanagh, family processes imply how family members interact. Contemporary family researchers have agreed that explaining why family processes matter and being able to connect different process within family systems is more beneficial for understanding diverse families than merely identifying general patterns (Crosnoe & Cavanagh, 2010). However, more work is needed regarding how family processes or interactions in ethnic single-mother families influence PYD. Consequently, I designed this study to examine how family processes or interactions in ethnic single-mother families and the role of important non-parental adults are connected to PYD.

Positive Youth Development and Outcomes

Taylor et al. (2010) argued that youth develop in positive ways with critical support and opportunities for helping them reach their full potential. Despite all of the known risk factors associated with single mothers, some families headed by single mothers have functioned better than expected given their vulnerabilities (Taylor et al., 2010; Whitaker et al., 2014). Finding connections between PYD and single-mother families would have implications for positive social change by providing information for intervention efforts targeted to support child development and parenting by single-mothers, and would help to justify focusing further research on this underserved population.

PYD is a construct researchers have used to examine youth development in relation to social and familial contexts, and the goal of PYD is to support youth development by promoting social, moral, emotional, physical, and cognitive growth (Thomas & Joseph, 2013). The degree of youth development can be measured in terms of positive child outcomes (e.g., social and emotional competence; Bradshaw, Hoelscher, & Richardson, 2007). Child outcomes are the result of the combination of the resources and support available to children and the risk factors that they face relating to their family, friends, schools, and their community environment. All of these factors are constantly evolving and are subject to the child's ability to develop positively (Bradshaw et al., 2007). Proponents of PYD stress that all youth are capable of thriving if given the opportunity and support for developing their strengths (Damon, 2004; Scales et al., 2000). According to Thomas and Joseph (2013), there are five areas considered important to the study of positive development of youth: parent-child relationship, family

interaction, adolescent participation, positive parenting practices, and positive marital relationships. In the present study, I examined the connections between the parent-child relationship of single mothers, family interaction of important non-parental adults, and PYD.

Parent-Child Relationships

The relationship between a parent and child has been studied extensively with results that confirm that the parent-child relationship is a strong predictor of adolescent well-being and positive development (Thomas & Joseph, 2013). Parent support has been associated with social competence and self-sufficiency (Thomas & Joseph, 2013). The quality of parent-child relationships can be measured in terms of communication, closeness, and trust. Families are children's primary environment for learning, and parents are children's first teachers. Parents' beliefs, behaviors, and attitudes shape and influence children.

However, parenting by ethnic minority parents is not without complications. Social stratification and negative stereotypes (e.g., racism) complicate the challenge of parenting and impedes a parent's efforts for PYD, which help adolescents become developmentally competent (Thomas & Joseph, 2013, p. 116). Racial socialization, for example, is an important aspect of rearing and has been proven to have important consequences for youth development (Hughes, 2003). Parent-child relationship quality has often been assessed by eliciting the childhood experiences of young adults (Bowers et al., 2014). The level of support a child receives and the level of nurturance and affection he or she receives are strong predictors of well-being in later life (Bowers et al., 2014).

Mallers, Charles, Neupert, and Almeida (2010) examined adults' perceptions of their childhood relationship with their parents and linked the quality of the relationship with emotional well-being later in life. Research on this topic has been limited by small samples that are exclusively male or consist of college students. Mallers et al. found that men reported higher rates of mother-child quality relations than father-child quality and that the mother-child relationship was significantly related to psychological distress (2010). The participants of this study did not adequately describe the population of the study. Mallers et al. used a sample that was predominately Caucasian (90.3%) with a small subsample of African-Americans (5.9%). Additionally, most of the participants were married. In this study, respondents from single-mother families were the focus for examining the unique connection of parent-child relationships to ethnicity and single-mother families (Mallers, Charles, Neupert, & Almeida, 2010). Parent-child relationships contribute to positive youth outcomes (Davis-Kean, 2005), but these factors have not been examined in single-mother families (Thomas & Joseph, 2013), nor have family interaction and the role important non-parental adults play in PYD. This is important because single-mother families rely more and more on important non-parental adults to help care for and support their children (Bowers et al., 2014).

Important Non-Parental Adults and Family Interaction

Single mothers often rely on other family members, community members, and networks for support in childrearing (Bowers et al., 2014; Jones, et al., 2007). Parents, as well as important non-parental adults, play important roles in promoting positive development in children and youth. Researchers have found links between these non-parental relationships and a range of developmental outcomes (psychological, socio

emotional, and behavioral; Zimmerman et al., 2002). Researchers have linked extended family and important non-parental support to high quality relationships between mother and child (Jones et al., 2007). For example, Goodrum, Jones, Kincaid, Cuellar, and Parent (2012) used data from the African American Families and Children Together (AAFACT) Project to explore the role of extended family members on children's psychosocial health from a small group of single mothers living in the North Carolina region. Goodrum et al. used families with children ages 11-16 (Stanton, Li, Pack, Cottrell, & Burns, 2002; Tragesser, Beauvais, Swaim, Edwards, & Oetting, 2007). Goodrum et al. found no links between age and gender with externalizing problems. A significant relation existed between mother and co-parent conflict and outcomes that suggested that non-marital co-parents (which includes active adults from extended family networks) are important but understudied relationships associated with the functioning of African American single-mother families (Jones et al., 2007; Shook, Jones, Forehand, Dorsey, & Brody, 2010).

Other types of relationships found to have effects on the lives of youth living in single-parent families include other important adults or caregivers (Bowers & Lerner, 2013). Lamborn and Nguyen (2004) examined 158 African American high school students in an urban Midwestern city, investigating associations between kinship support and teen outcomes in areas of ethnic identity, self-reliance, school and work orientation, and school values. The researchers found the support of the extended family to be related to each outcome except for school values (Lamborn & Nguyen, 2004). Extended family support positively related to adolescent adjustment, apart from the parent-child relationship as perceived by the child (Lamborn & Nguyen, 2004).

Researchers have found that in African-American single-parent families, in particular, extended kinship support is highly valuable (Taylor, 2010), which may hold for other ethnic minority populations and single-mother families as well. Studies show that intergenerational and kinship relations not only reduce stress for single-parents but also are instrumental in educational achievement and enhancing parenting skills (Lamborn & Nguyen, 2004). Single mothers, as well as their children, who receive social, emotional, and practical support from extended kin have shown to be more positive in their interactions within their immediate families, improving parent quality and contributing to positive child outcomes (Taylor & Roberts, 1995; Taylor et al., 2010).

McDonald, et al., 2011) studied the relationship between youth exposure to community violence, family functioning, and PYD in communities consisting of urban youth. The study involved a small convenience sample of 110 youth, 96% African American and 3% other races ages 10-16 living in an urban section of Philadelphia (McDonald et al., 2011). McDonald et al. found a significant association between exposure to violence and lowered PYD. The interaction between gender and family functioning was also significant. These researchers found that the functioning of the family had the most influence on PYD concerning community violence exposure (2011). Family interaction is an area that needs more research.

Watkins-Lewis and Hamre (2012) confirmed that family and parenting have an influence on adolescents' psychosocial development. The findings suggested that a key factor in promoting PYD might be to increase children’s connections and experiences with important non-parental adults. Watkins-Lewis and Hamre (2012) included more

than 75% European American youth, and less than 5% African American youth were included in this analysis.

Family Environments

A positive family environment (including important non-parental adults) that involves parenting supervision, communication and prosocial family values can reduce high-risk behaviors, such as delinquency, substance abuse, and other factors that have been found to be most influential in positive youth outcomes include family cohesion, parental communication, supervision and positive family values (Kumpfer, et al., 2010). Researchers have generally concluded that the family environment and parent-child interaction are related (McCarty, Zimmerman, DiGuiseppe, & Christakis (2005). McCarty, Zimmerman, DiGuiseppe, and Christakis (2005) conducted a study on the links between family environment and positive youth experiences. The authors found the positive interaction of youth transcends with context. A child who perceives an experience to be positive in one setting or context will report positive interactions in other settings (McCarty et al., 2005).

Taylor et al. (2010) described the association that exists between the presence of ecological assets (e.g., family and environment), individual assets, and positive development which was defined as thriving. The researchers found that both youth gang members and youth in community organizations showed stable levels of asset scores, though community-based organization members showed more developmental assets and evidence of higher thriving than gang members (Taylor et al., 2010). The study offers justification for further research utilizing a PYD perspective for youth who live in adverse conditions.

Family Environments and PYD

Chand, Farruggia, Dittman, Ting Wai Chu, and Sanders (2013) conducted a brief parenting intervention program to examine the effects of family factors associated with positive youth outcomes as well as to evaluate intervention strategies inclusive of the family context that produce increases in PYD attributes. Parenting measures consisted of parenting styles and monitoring. Family relations measures consisted of parent-child conflict and family cohesion as indicated by the Family Environment Scale (Moos & Moos, 1994). PYD measures were caring, connection to family, connection to school, and social conscience. The results of the paired samples t-tests analysis showed that after the brief intervention, parents reported significantly less conflict with their adolescent, and consequently the adolescents reported increased family cohesion and connection to family and school. Chand et al. (2013) used several measures similar to the present study because it measured family relations and parent-child relations. PYD promotes traits such as caring, confidence, connection, and competence. This article provides support for the need for this study. It suggests positive youth outcomes are associated with parenting and family factors, although these researchers used a very small sample. In addition, this study, like so many others, included participants who were mostly married and of European descent.

Research is limited when examining positive development in adolescents within the context of family relationships, including important non-parental adults, across several years of youth development (Bowers et al. 2014; Dubois & Silverthorn, 2005). In addition, PYD outcomes in ethnic minority youth in relation to single-mother families and important non-parental adults have not been studied. PYD models have not

emphasized cultural factors that influence youth development. Researchers studying PYD have failed to report on the role of ethnicity in positive youth outcomes in single-mother families (Evans et al., 2012; Jones et al., 2007). This study added to the gap in the literature regarding the connections between single-mother families, ethnicity, and PYD.

Literature Gaps

An initial review of the literature on single-mother families revealed a lack of research to date regarding stable, single-mother families, particularly those of ethnic minorities (Nixon et al., 2012). Despite the recommendations for more research on the parenting of single mothers (Evans et al., 2012; Thomas & Joseph, 2013), most of the research on single mothers has pertained to the risk factors and stressful conditions associated with parenting alone (Crosnoe & Cavanagh, 2010; Nixon et al., 2012; Parent et al., 2013; Zeiders et al., 2011). These studies have suggested only negative influences of the single-mother family structure on children (Crosnoe & Cavanagh, 2010; Nixon et al., 2012; Parent et al., 2013; Taylor, 2010; Zeiders et al., 2011). Researchers have not adequately investigated the relationship between ethnicity and single-mother families on PYD (Barajas, 2011) or the roles important non-parental adults play in PYD (Bowers et al., 2014). In addition, studies on ethnic minority families have often missed social processes that explain PYD (Murry et al., 2001). This gap in research has caused the experiences of families headed by single mothers to be underrepresented in the literature on PYD (Barajas, 2011). The few studies on ethnic minority single mothers (Jones, Forehand, Brody, & Armistead, 2003; Lipman, Boyle, Dooley, & Offord, 2002; Repetti, Taylor, & Seeman, 2002) were based on a cultural deficit model, which focused on the

negative effects of this population, rather than expanding research to reflect ethnic populations and different positive developmental factors (Kjellstrand & Harper, 2012).

Jones, Forehand, Brody, and Armistead, (2003) conducted a study on what the researchers termed a dangerous environment that was created for youth who were cared for by single, African American mothers because of inadequate parental monitoring provided by these mothers. The authors found that children in single-mother homes where they were exposed to hostile conditions and hostile parenting were at increased risk for psychological problems (Jones et al., 2003). Repetti, Taylor, and Seeman (2002) examined the effect of children raised in risky families where parents exhibited behavior that was cold, unsupportive, violent, argumentative, or neglectful and found that children raised in these risky environments were more susceptible to mental and health disorders such as anxiety, addiction, and poor social and emotional development. Repetti et al. cited children of single-parent homes as part of the population of children who may be at risk for social problems. However, according to Taylor (2010), single mothers, despite the risk factors, have shown connections to PYD and have functioned better than expected given single mothers' vulnerability.

Summary

Conventional wisdom and past research indicate that children who grow up in a household without two parents are at higher risk of doing poorly socially, and present many questions and speculation regarding PYD of children from single-mother families. The experiences of ethnic minority single mothers, in particular, continue to be unrepresented by research that has primarily involved White, middle-class families to study PYD in single-parent families (Barajas, 2011; Crosnoe & Cavanagh, 2010).

Kotchick et al. (2005) reported on a study conducted by Murry, Bynum, Brody, Willer, and Stephens (2001) in which protective factors, such as social support and extended family, helped single mothers to parent successfully despite the financial challenges and community-related risks they face. Identifying the connections between PYD and single-mother families may lead to information that will enable these mothers to parent more successfully under stressful conditions and widening targets for intervention and prevention strategies that may help single mothers engage in PYD (Kotchick, Dorsey, & Heller, 2005). In addition, identifying connections between important non-parental adults and PYD may lead to understanding how important non-parental adults support single-mother families in positive child development.

Chapter 3 expands on the methodology and research design of the study, including the rationale for the design, the population and sample size, as well as instrumentation and data analysis procedures. I also addressed the threats to validity and ethical considerations in Chapter 3.

Chapter 3: Research Method

Introduction

The purpose of this quantitative correlational study was to examine the relationship between the independent variables of ethnicity, parent-child relationship, and family interaction (the role of important non-parental adults), and the dependent variables of developmental outcomes (social and emotional competence) for youth living in families headed by single mothers. My intended purpose for this study was to add to existing research related to family structure while identifying links between single-parent homes led by mothers and positive developmental outcomes in children. Specifically, I wanted to investigate the links between family relationships, family interaction, and ethnicity using secondary data from the PHDCN assessment, a longitudinal study that originally investigated family structure and youth development from adolescence to early adulthood (Earls, Brooks-Gunn, Raudenbush, Reiss, & Sampson, 1995).

In this chapter I (a) specify the methods and procedures I used to analyze associations found between ethnicity, parent-child relationship, and family interactions on social and emotional outcomes for youth growing up in families headed by single mothers; (b) identify and justify the research design choice; (c) explain the data analysis plan and ethical considerations for the study; and (d) provide a summary of the chapter.

Research Design

This was a quantitative non-experimental study. Ethnicity, parent-child relationship, and family interactions, including interaction with non-parental adults, were the independent variables. Emotional and social outcomes were the dependent variables. I culled data for the study from the scales included in the PHDCN survey. Specifically,

to address the research questions guiding the study, I used the Provisions of Social Relations Scale and the HOME inventory. I used the Provision of Social Relations Instrument to assess the social support that subjects received from friends and family, and examined specific questions regarding the youth's primary source of help and the youth's closeness to mother and to family members. The HOME inventory allowed for exploration of how the home environment met youth's needs through such dimensions as how primary caregivers spent their time, with a series of yes and no questions gauging their participation in activities, such as visiting relatives or friends, and routines, such as eating meals together as a family at the same time each day. This instrument also contains age appropriate questions designed to observe the development appropriateness of the environment for the subject, as well as the subject's positive and negative interactions between the subject and the primary caregiver.

The research questions I designed to guide this study were:

*RQ*1: Are there differences in closeness to the mother in single-parent families, related to race/ethnicity and cohort?

*RQ*2: Are there differences in closeness to family members in single-parent families, related to race/ethnicity and cohort?

*RQ*3: Within single-parent families, are emotional outcomes for youth predicted by closeness to the mother and closeness to family members?

*RQ*4: Within single-parent families, was there a relationship between family interaction and social outcomes for youth?

*RQ*5: Are there differences in family interaction (i.e., child-parent and child-other family members), related to race/ethnicity and cohort?

I selected a quantitative methodological approach for this study because the research comprised statistical analysis of numerical data. Quantitative methods are employed when the researcher intends to measure data objectively and utilize statistical analyses to understand numerical data (Mustafa, 2011). I employed the quantitative design to determine if race/ethnicity, closeness to mother, and closeness to other family members influence youth development outcomes. Quantitative methods are appropriate when the goal of the researcher is to investigate relationships among numerically measured variables (Allwood, 2012). Researchers select a quantitative approach when the emphasis of the research is not on exploring relationships, but rather on investigating variables (Rawbone, 2015). A qualitative methodology is deemed appropriate when a researcher seeks to explore a phenomenon or a situation as conveyed through nonnumeric data (Merriam, 2009).

In this study, I examined youth of diverse ethnicities living in households headed by single mothers. The dependent variables were developmental outcomes of the youth as emerging adults in the domains of emotional and social functioning. By electing to frame this study as a quantitative non-experimental design using secondary data from a former longitudinal study, I did not encounter any time or resource constraints.

My extensive literature search revealed a multitude of studies with a deficit approach on the single-family structure; however, very few studies investigated any positive developmental outcomes that may emerge from single-mother families. Other studies in the field have investigated differences in developmental outcomes for youth by ethnicity; however, these studies have often emphasized negative consequences of growing up in single-family homes (Taylor, et al, 2010; Whittaker, et al, 2014). These

studies pertained to relationships between being raised in single-parent families and negative developmental outcomes. Despite this study's shift in focus from negative to positive outcomes, I employed a quantitative design to align with similar studies that also used numeric data to investigate relationships between family structure and developmental outcomes. To further advance knowledge in the field of family science, it is necessary to assess how closeness to the mothers, fathers, and other relatives may influence developmental outcomes. This can be established by quantifying concepts and measuring significant differences in these populations. This strength-based study helped to advance knowledge across multiple disciplines of family and child studies by providing researchers with a basic knowledge of the influence of race/ethnicity and familial context on developmental outcomes.

Methodology

Population and Sample

I analyzed secondary data gathered via the PHDCN study (Earls, Brooks-Bunn, Raudenbush, & Sampson, 2006). The PHDCN is a longitudinal cohort study that was originally used to investigate the family structure and youth development of Chicago residents between 1994 and 2002. Longitudinal and cross-sectional approaches have frequently been used in developmental research (Campbell et al., & Stanley, 1963). The target population comprised families in Chicago neighborhoods. Chicago was chosen because of the stability of neighborhoods and the diversity of Chicago's citizens (Sampson, 2012).

The PHDCN sample was initiated by generating 343 neighborhood clusters representing homogenous groups for race/ethnicity, socioeconomic status, family

structure, and dwellings (Earls, et al., 1997). I implemented classification by race/ethnicity and socioeconomic status with a stratified sample of 80 neighborhoods for inclusion in the study. The sampling process involved stratified sampling to develop a sample that was representative of the larger population for which all participants have equal chance to be selected for inclusion (Urdan, 2010). I gathered potential participating families and family structure information from the original study. Households with children aged 0 to 18 years of age were eligible for inclusion in the PHDCN study. I classified children into seven age groups: within six months of birth, 3, 6, 9, 12, 15, and 18. There was an approximately equal mixture of male and female participants (Earls & Buka, 1997). I used a random sample of more than 6,000 children, youth, and their caregivers and used three waves of surveyed data collection. The researchers collect informed consent for each participant prior to each wave of data collection (Martin, Gardner, & Brooks-Buss, 2012). More than 6,000 randomly selected children, adolescents, young adults, and their primary caregivers were examined over time. For this study, I harvested secondary data for youth surveyed up to the age 18 during at least one of the three waves.

Sample Size

To investigate the research questions guiding this study, I conducted a one-way analysis of variance (ANOVA) and Pearson correlations. For the ANOVA, I used a medium effect size (f=.25), an alpha of 0.05, a generally accepted power of .80, and three groups. A sample size of 159, or 53 participants per group, was necessary for empirical validity (Faul, et al, 2015). For the Pearson correlations, I used a medium effect size (ρ=.30), an alpha of 0.05, a generally accepted power of .80. To establish empirical

validity for the correlation analysis, a sample of 84 was necessary (Faul, Erdfelder, Buchner, & Lang, 2015). I harvested secondary data for a sample of at least 159 participants, spread equally across groups, for the study.

Procedures for Recruitment, Participation, and Data Collection

For the PHDCN study, researchers initially identified neighborhoods for possible participation in the study. Recruitment materials were provided to the adults in the Chicago neighborhoods households. Those who were interested in participating were administered informed consent prior to participating in data collection. Three waves of interviews were conducted to collect data. Researchers used this data to construct the final dataset. To obtaining this data, I had to be granted approved access. Some of the data was available for public use and some the data needed was restricted. The restricted data required a restricted data use agreement to specify my reason for use and approval from Walden University's Institutional Review Board (IRB). I contacted the research administrators to gain access to the dataset (Appendix A). With their permission, I accessed the full dataset to secure the variables that were necessary for the study (IRB approval number 05-31-16-0156158).

Instrumentation and Operationalization of Variables

For this study, I investigated the independent variables of ethnicity, parent-child relationship, and family interaction (the role of important non-parental adults) and the dependent variables of developmental outcomes (social and emotional competence) for youth living in families headed by single mothers within the PHDCN dataset. I considered the PHDCN study to be an appropriate source of secondary data for this study because the researchers examined the changing personal characteristics of participants to

gauge aspects of human development and differences in individual, family, peer, and school influences over time (Earls, et al., 1997). This alignment fit the purpose of my study, offering data to investigate how family relations influence positive social and emotional outcomes for children of diverse ethnic backgrounds raised in single-mother families. To pursue this line of inquiry, I selected several of the datasets from the PHDCN study that aligned with the stated purpose of the study (see the Appendix), to investigate if race/ethnicity and family assets related to emotional and social outcomes for children raised in single-mother families. The principal investigator of the original PHDCS project was Dr. Felton Earls, MD.

The PHDCN study consisted of several instruments to investigate numerous aspects of youth development, family relations, and home life for youth. The instruments of interest to me were the Attitudes Towards Mother and Father Instrument, Provision of Social Relations, the Young Adult Self Report, the Home and Life Interview, and the HOME inventory.

Attitudes Toward Mother and Father

The Attitudes Toward Mother and Father instrument was administered to subjects in Cohorts 6, 9, and 12 to collect information regarding the subject's relationship to the subject's mother. Closeness to mother was operationally defined as the attachment between the developing youth and his or her mother and gauges how well supported the youth feels among their family and friends. The data from this instrument was collected by telephone and face-to-face interviews. The subjects were read statements and asked to judge how often each statement applied to them; statements included "I get along well

with my mother", "My mother is very irritating", and "I can really depend on my mother".

The Provision of Social Relations (PSR) Instrument

This instrument was created to assess the social support that subjects received from friends and family. The Provision of Social Relations instrument was administered for ages 9, 12, 15, and 18 in Wave 1, and ages 6, 9, 12, 15, and 18 in Wave 3 (Turner, Frankel, & Levin, 1983). This instrument measured closeness to family members and friends. Closeness to family members was operationally defined as the attachment between the developing youth and his or her family and friends and this gauges how well supported the youth feels among their family and friends. The items are scored on a 3 point Likert scale, with response options ranging from 1 (*very true*) to 3 (*not true)*. Questions include items such as "people who know me trust me and respect me" and "I know my family will always stand by me."

Young Adult Self Report

The data in the Young Adult Self Report collection were from Wave 3 of the Longitudinal Cohort Study. The Young Adult Self Report instrument was an extension of the Youth Self Report, designed to measure the youth's behavioral and emotional functioning (Achenbach,1997). This report has been shown to produce excellent results evaluating respondents' psychological and behavioral functioning. This proved to be an ideal instrument for the study as it evaluated the subjects as they approached adulthood. The respondents were asked to rate the truthfulness of statements such as "I argue a lot," "I work up to my ability," and "I am nervous or tense."

The Home Observation for Measurement of the Environment (HOME).

The HOME inventory was implemented through semi-structured interviews that explored how the home environment met developing youths' needs (Caldwell & Bradley, 1984). The researcher implemented the HOME inventory in Wave 1 with primary caregivers of developing youth ages 3-18. In Waves 2 and 3, a home and life interview was conducted to reflect the content on the HOME instrument. The interviews were conducted with primary caregivers of developing youth ages 0-15 in Wave 2, and ages 0-9 in Wave 3. Researcher have used the HOME instrument in previous studies to measure the developmental environment that affects the youth's social behaviors. Family interaction has been operationalized with the activities and routines established in the developing youth's life. Questions on the HOME instrument explored how primary caregivers spent their time, with a series of yes and no questions gauging their participation in activities, such as visiting relatives or friends, and routines, such as eating meals together as a family at the same time each day.

Home and Life Interview

The Home and Life Interview instrument was a restructured version of the HOME inventory, used to evaluate aspects of the subject's developmental environment that could affect future positive or negative social behaviors. The Home and Life Interview directed questions toward the primary caregiver to determine the extent of the relationship between the primary caregiver and the subject. Age-appropriate questions were designed to assess the subject's developmental environment. The data in this collection of the Longitudinal Cohort Study was administered in both Waves 2 and 3. The Home and Life

Interview summarized a variety of experiences in the home that the subject encountered in his or her adolescent years.

Data Analysis Plan

The researchers entered the data into SPSS version 22.0 for Windows. The data were screened for accuracy and outliers. The value ranges of responses were examined by the researcher to ensure that responses were accurate and valid. The researcher tested the data for the presence of outliers by the examination of standardized residuals. Standardized values were created for each subscale score and cases were examined for values that fell above 3.29 and fell below -3.29 (Tabachnick & Fidell, 2012). Descriptive statistics were performed to provide details about the sample demographics (see Appendix for demographic information), including socioeconomic background, marital status, household composition and education of the parent or guardian(s). Means and standard deviations were calculated for continuous variables, and frequencies and percentages were calculated for categorical variables.

RQ1: Are there differences in closeness to the mother in single-parent families, related to race/ethnicity and cohort?

$H_0$1: There are no differences in closeness to mother in single-parent families, related to race/ethnicity and cohort.

H_A1: There are differences in closeness to mother in single-parent families, related to race/ethnicity and cohort.

RQ2: Are there differences in closeness to family members in single-parent families, related to race/ethnicity and cohort?

$H_0$2: There are no differences in closeness to family members in single-parent

families, related to race/ethnicity and cohort.

H_A2: There are differences in closeness to family members in single-parent families, related to race/ethnicity and cohort.

RQ3: Within single-parent families, are emotional outcomes for youth predicted by closeness to the mother and closeness to family members?

H_03: Emotional outcomes for youth are not predicted by closeness to the mother and closeness to family member.

H_A3: Emotional outcomes for youth are predicted by closeness to the mother and closeness to family members.

RQ4: Within single-parent families, was there a relationship between family interaction and social outcomes for youth?

H_04: There was no relationship between family interaction and social outcomes for youth.

H_A4: There was a relationship between family interaction and social outcomes for youth.

RQ5: Are there differences in family interaction (i.e., child-parent and child-other family members), related to race/ethnicity and cohort?

H_05: There are no differences in family interaction (i.e., child-parent and child-other family members), related to race/ethnicity and cohort.

H_A5: There are differences in family interaction (i.e., child-parent and child-other family members), related to race/ethnicity and cohort.

To assess Research Questions 1, 2, and 5, I conducted a factorial ANOVA. Factorial ANOVAs are appropriate when the aim is to analyze differences on a

continuous variable between two or more discrete grouping variables, specifically race/ethnicity and cohort (Tabachnick & Fidell, 2012). Through the ANOVA, the *F* test, allows researchers to make overall comparisons on group means. The *F* test is the ratio of independent variance estimates of the same population variance (Howell, 2010). If the obtained F is larger than the critical F, the null hypothesis is rejected (Pagano, 2010). The researcher presented the results of the factorial ANOVA in the form of main effects and the interactions among study variables. For significant interactions, post hoc analyses consisting of a series of independent *t*-tests were performed.

The researcher examined the assumptions of ANOVA prior to conducting the analysis. The researcher assessed for normality assuming a bell-shaped distribution for the scores along with the Kolmogorov Smirnov test (Cramer, 1998). Homogeneity of variance assumes both groups have equal error variances using Levene's test (Brace, Kemp, & Snelgar, 2012). In many cases, the ANOVA is considered a robust statistic in which assumptions can be violated with relatively minor effects (Howell, 2010).

To assess Research Question 3, I used multiple regression analysis. Multiple regression is the appropriate analysis when the goal of the researcher is to investigate if dichotomous or continuous predictor variables predict a continuous outcome variable. For this study, the predictor variables were closeness to mother and closeness to family members; the outcome variable was emotional outcomes. The researcher used standard entry method, entering all independent variables into the model simultaneously (Tabachnick & Fidell, 2012). The *F* test assessed if the predictors collectively predict the dependent variable. The multiple correlation coefficient of determination, R-squared,

was reported to convey how much variance in emotional outcomes could be accounted for by closeness to mother and closeness to family members (Pagano, 2010).

The researcher assessed for assumptions of linearity, homoscedasticity, and multicollinearity. Linearity assumes a straight-line relationship between the independent variables and the dependent variable; homoscedasticity assumes that scores are distributed normally about the regression line. The researcher assessed the assumptions of linearity and homoscedasticity by examining scatterplots (Tabachnick & Fidell, 2001). The assumption of multicollinearity assumes that predictor variables are not highly related. The absence of multicollinearity was assessed by the researcher using Variance Inflation Factors values higher than 10 to reveal evidence of multicollinearity (Stevens, 2009).

To assess Research Question 4, I conducted Pearson correlations. Pearson product-moment correlation (r) is a bivariate measure of association (strength) of the relationship between two variables. Given that all variables were continuous (interval/ratio data), and the hypotheses assessed the relationships or how the distribution of the z-scores varied, Pearson correlations was the appropriate bivariate statistic (Pagano, 2010). Correlation coefficients can vary from 0 (no relationship) to +1 (perfect positive linear relationship) or -1 (perfect negative linear relationship). Positive coefficients indicate a direct relationship as one variable increases the other variable also increases. Negative correlation coefficients indicate an inverse relationship, as one variable increases, the other variable decreases. The researcher used Cohen's standard (Cohen, 1988) to evaluate the correlation coefficient to determine the strength of the relationship, where coefficients between .10 and .29 represent a small association;

coefficients between .30 and .49 represent a medium association; and coefficients above .50 represent a large associate or relationship. The researcher assessed the assumptions of Pearson correlation, including linearity and homoscedasticity. Linearity assumes a straight-line relationship between the independent and dependent variables and homoscedasticity assumes that scores were normally distributed about the regression line. Linearity and homoscedasticity were assessed by examination of scatter plots (Stevens, 2009).

Threats to Validity

Former researchers have reported with high frequency on the association of parenting practices and the promotion of child development and discipline practices (Walker & Kirby, 2010). Researchers also reported that the failure of some of these studies to make important connections between measures have limited the validity of these measures and therefore limited its importance to advancing research and practice in maternal-child research (Walker & Kirby, 2010). For the study, I endeavored to overcome this threat to validity by addressing investigating links between family relations and social and emotional behavior.

Because the dataset was from a longitudinal study, there were some potential threats to internal validity such as maturation and history. Maturation refers to changes in the dependent variable because of normal development of the participant (Tofthagen, 2012). While I was unable to control the influence of maturation on the dependent variables, I caution readers to temper inferences drawn from this research with the knowledge a natural development and change exists in the dependent variables that may occur as participants' age. History, as a threat to validity, refers to any major event that

may occur during a study that may affect the outcome of the study (Tofthagen, 2012). The original study used to gather data occurred during a period that included various events, such as the attack on the World Trade Centers. However, because this was a nationwide occurrence that would have affected all participants within the same period, the potential threat to validity was mitigated. Reactivity is another potential threat to validity, as primary caregivers may modify their actions with participants because of engaging in the study. Because of the large sample of participants included, I expected that potential effect of reactivity of some participants was minimized by the lack of reactivity in the rest of the sample.

Ethical Considerations

Prior to conducting this study, I secured the approval of Walden University's IRB and the PHDCN researchers to access the secondary data. Because I did not engage participants directly, I could not observe if ethical practices were maintained for the security and integrity of the data collection. A security plan for obtaining the data was provided with subsequent permission to access the secondary data files. Once the data were harvested, I confirmed the data had been stripped of any identifying information. I removed any remaining identifying data from the dataset prior to analysis.

After gathering the data, I stored the electronic file on my personal password-protected computer. Upon the completion of the study, I will delete all the data from my computer's hard drive. Secondary data were available to my committee and my committee chair for review. Any reporting done on the data occurred at the aggregated level, further protecting the rights of the participants. Because I had no connection to the

sample under investigation no potential power differentials or conflicts of interest existed in the study.

Summary

This quantitative study focused on positive developmental outcomes for youth developing in single-parent families headed by mothers. I aimed to bolster the current knowledge related to outcomes for youth raised in single-parent families by investigating and highlighting positive dimensions and influential relations that produce positive youth outcomes. The relationships revealed augmented the existing literature by taking a strengths-based approach rather than a deficit-based approach in investigating youth in single-parent families.

This chapter detailed the research design and methodology for this study. Additionally, the chapter presented the research questions, the population and sample for the primary study, as well as the method for data collection in the primary study and my secondary data harvesting. I also detailed the data management and analysis steps implemented. Last, the chapter outlined the threats to validity and ethical considerations. Chapter 4 includes the results of data analysis within the study.

Chapter 4: Results

Introduction

The current study centered on an examination of the influence of single-mother families and important non-parental adults of diverse ethnicities on the positive development of youth. Specifically, the purpose of this quantitative correlational study was to investigate the relationship between the independent variables of ethnicity, parent-child relationship, and family interaction (the role of important non-parental adults), and the dependent variables of developmental outcomes (social and emotional competence) for youth living in families headed by single mothers. Researchers have addressed youth development from the deficit perspective (Grall, 2009; Kjellstrand & Harper, 2012). In this study, my focus was on assets inherent in the family, and the positive aspects of developing within a single-mother household. The research questions and hypotheses I designed to guide this investigation were:

RQ1: Are there differences in closeness to the mother in single-parent families related to race/ethnicity and cohort??

RQ2: Are there differences in closeness to family members in single-parent families related to race/ethnicity and cohort?

RQ3: Within single-parent families, are emotional outcomes for youth predicted by closeness to the mother and closeness to family members?

RQ4: Within single-parent families, is there a relationship between family interaction and social outcomes for youth?

RQ5: Are there differences in family interaction (i.e., child-parent and child-other family members) related to race/ethnicity and cohort?

In this chapter, I present the results of the data analysis. Specifically, I provide an overview of the data collection process. I also report the demographic characteristics of participants and an accounting of the results of the statistical analysis. Chapter 4 closes with a summary of the salient findings.

Data Collection

For this study, I used data from the PHDCN study (Earls et al., 2006), a longitudinal cohort study that was originally used to investigate the family structure and youth development of Chicago residents between 1994 and 2002. To obtain this restricted data, I contacted the appropriate administrators for the PHDCN study and requested access to the required datasets. Following completion of the applicable restricted data use agreement and related forms, the PHDCN staff sent a link to download the data files provided. A password to access the protected data was sent via an email separate from the link containing the data files. Following the extraction and secure storage of the data, I organized the data for analysis.

I calculated composite scores for closeness to mother, closeness to family, emotional outcomes, social outcomes, and family interaction. I calculated the closeness to mother score from the items included in the Attitudes Toward Mother and Father Instrument. Items 18, 20, 21, and 24 from the scale were reverse coded to maintain consistency in the scoring of the items on the instrument. I calculated closeness to family using the Provisions of Social Relations Instrument. Items 4, 7, 9, 10, and 13 were reverse scored so that higher scores on the question reflected a closer connection between the child and their family (e.g., “I know my family will always be there for me” was reverse scored so that a response of very true was scored as a 3). I calculated emotional

outcomes using items from the Provisions of Social Relations Instrument that relate to participants' emotional connections. I originally planned to calculate the emotional outcome variables using the Young Adult Self Report Instrument. However, the dataset lacked sufficient data to conduct a regression analysis with closeness to family and closeness to mother predicting emotional outcomes. Specifically, the participants who contributed sufficient data to calculate an emotional outcomes measure using the Young Adult Self Report scale lacked closeness to mother and family scores. Because the data were not present to support this analysis, I utilized the items related to emotional outcomes from the Provisions of Social Relations Instrument to calculate the emotional outcomes variable. Social outcomes were calculated using the items from the Provisions of Social Relations Scale that relate to the participants' ability to develop social connections. I originally planned to calculate social outcome using the Home and Life Interview Instrument. However, in reviewing the items within the instrument, I determined that the scale assessed the connection between the child and the family not social outcomes for the participant. I reverse scored items 11 and 12 from the instrument ("people think I am good at what I do and friends would take time to talk about problems") so that higher scores on the items reflected positive social outcomes.

Demographic Characteristics

Prior to conducting the analyses, I calculated the range of values for responses in the dataset to ensure that responses were accurate and valid. All calculated values fell within the range of feasible responses. Because of this, I determined that the responses were accurate. I calculated standardized values to investigate the presence of outliers. Standardized values were calculated for closeness to mother, closeness to family, family

interaction, emotional outcomes, and social outcomes. I screened each variable for outlier values. Standardized values higher than 3.29 units away from the sample were considered evidence of outliers and were removed from the dataset (see Tabachnick & Fidell, 2012). Table 1 shows the number and range for outliers I removed from the dataset. The final dataset comprised responses for 4,378 subjects.

Table 1

Number and Range for Outliers on Continuous Variables

Variable	No. Removed	Minimum Value	Maximum Value
Closeness to Family	12	-3.74	-4.66
Emotional Outcomes	15	-3.54	-4.41
Family Interaction	14	-3.35	-4.97
Closeness to Mother	10	-3.41	-4.78
Social Outcomes	5	-3.46	-3.98

I calculated frequencies and percentages for gender of subject, education level of the primary caregiver, employment status for primary custodian, household income, marital status of primary custodian, and ethnicity for subject and primary caregiver. These values are shown in Table 2. The sample was roughly even split between male (*N* = 2187, 50%) and female participants (*N* = 2191, 50%). Responses related to the highest level of education attained for primary custodians varied; however, a third of the sample held a diploma as their highest level of education achieved (*N* = 380, 33%). More than half of the primary custodians in the sample worked either part time or full time (*N* = 2518, 58%) and were married (*N* = 2463, 56%). Income varied in the sample, with $10,000-$19,999 (*N* = 711, 16%), $20,000-$29,999 (*N* = 725, 17%), and $30,000-

$39,999 (*N* = 542, 12%) as the most common responses. A significant portion of subjects (*N* = 1766, 40%) and primary custodians (*N* = 1848, 42%) were Hispanic.

Table 2

Frequencies and Percentages for Categorical Variables

	N	%
Gender		
Male	2187	50.0
Female	2191	50.0
Education Level		
Less than high school diploma	316	7.2
High school diploma	380	8.7
GED	106	2.4
Associate's degree	121	2.8
Bachelor's degree	111	2.5
Master's degree	39	.9
Doctoral degree	10	.2
Other	55	1.3
Employment Status		
Employed, part time and full time	2540	58
Keeping house	1228	28.0
Going to school	150	3.4
Unable to work	83	1.9
Unemployed	201	4.6
Other	115	2.6
Income		
Less than $5,000	340	7.8
$5,000-9,999	430	9.8
$10,000-19,999	711	16.2
$20,000-29,999	725	16.6
$30,000-39,999	542	12.4
$40,000-49,999	380	8.7
$50,000-59,999	272	6.2
$60,000-69,999	181	4.1
$70,000-79,999	141	3.2
$80,000-89,999	85	1.9
Over $90,000	175	4.0
Marital Status		
Single	945	21.6
Separated	250	5.7
Divorced	233	5.3
Widowed	90	2.1

Married	2463	56.3
Living with partner	371	8.5
Ethnicity of Subject	945	21.6
Hispanic	1766	40.3
Asian	49	1.1
Pacific Islander	1	.0
Black	1305	29.8
White	652	14.9
Native American	9	.2
Other	496	11.3
Ethnicity of Primary Custodian		
Hispanic	1848	42.2
Asian	54	1.2
Pacific Islander	4	.1
Black	1325	30.3
White	756	17.3
Native American	10	.2
Other	344	7.9

Note. Due to rounding and missing data values may not add up to 100%.

I calculated means and standard deviations for closeness to mother, family interaction, closeness to family, emotional outcomes, and social outcomes scores. These values are presented in Table 3. Closeness to mother scores ranged from 1.00 to 4.00, with a mean score of 3.43 (*SD* = .51). Family interaction scores ranged from 0.14 to 1.00, with a mean score of 0.77 (*SD* = .13). Closeness to family scores ranged from 0.63 to 2.25, with a mean score of 1.89 (*SD* = .27). Emotional outcomes scores ranged from 1.00 to 3.00, with a mean score of 2.70 (*SD* = .39). Social outcomes scores ranged from 1.00 to 3.00, with a mean score of 2.55 (*SD* = .39).

Table 3

Means and Standard Deviations for Continuous Variables

	N	Min.	Max.	*M*	*SD*
Closeness to mother	1521	1.00	4.00	3.43	0.51
Family interaction	3393	0.14	1.00	0.77	0.13
Closeness to family	2061	0.63	2.25	1.89	0.27
Emotional outcomes	2081	1.00	3.00	2.70	0.39
Social outcomes	2072	1.00	3.00	2.55	0.39

Results

Statistical Analysis Findings

RQ1: Are there differences in closeness to the mother in single-parent families, related to race/ethnicity and cohort?

$H_0$1: There are no differences in closeness to mother in single-parent families, related to race/ethnicity and cohort.

H_A1: There are differences in closeness to mother in single-parent families, related to race/ethnicity and cohort.

To address Research Question 1, I conducted a factorial ANOVA to determine if differences existed in closeness to mother in single-parent families related to ethnicity and cohort. Prior to conducting the analysis, I assessed the assumptions of normality and homogeneity of variance. I assessed the assumption of normality using the Kolmogorov-Smirnov test for normality. Normality was violated for closeness to mother ($p < .001$). I assessed the assumption of homogeneity of variance using the Levene's test. Homogeneity of variance was violated ($p < .001$). In many cases, the ANOVA is

considered a robust statistic in which assumptions can be violated with relatively minor effects (Howell, 2010). Because the assumptions of normality and homogeneity of variance were not met, I transformed the closeness to mother variable in an attempt to address the violations of the assumptions. I conducted log, natural log, and square root transformations on the data. However, for all three iterations of transformed variables, the assumptions of normality and homogeneity of variance were violated. Because the transformed variables did not improve the ability to meet these assumptions, I maintained the untransformed variable in the analysis.

Results of the factorial ANOVA indicate that no statistically significant difference existed in closeness to mother across ethnic groups, $F(6,1433) = 2.04$, $p = .058$. Additionally, closeness to mother scores did not have a statistically significant difference across cohorts by ethnicity $F(9,1433) = 1.54$, $p = .130$. The results of the analysis reflected a statistically significant difference in closeness to mother scores related to cohort, $F(2,1433) = 15.48$, $p < .001$. Pairwise comparisons were conducted across cohorts to determine the source of the statistical significance. I found that the mean closeness to mother scores were higher in the cohort of 6 year olds than for the 9 and 12-year-old cohorts. I assessed a higher mean closeness to mother score in the 9-year-old cohort than the 12-year-old cohort. Table 4 shows the results of the factorial ANOVA. Table 5 shows the descriptive statistics for the closeness to mother by cohort and ethnicity. Table 6 shows results of the pairwise comparisons per cohort, and Figure 1 shows the estimated marginal means for closeness to mother scores.

Table 4

Results of the Factorial ANOVA for Cohort, Ethnicity, and Closeness to Mother

Source	Type III Sum of Squares	df	Mean Square	*F*	*p*	Observed Power
Cohort	6.65	2	3.32	15.48	.000	.999
Ethnicity	2.63	6	0.44	2.04	.058	.746
Cohort*Ethnicity	2.97	9	0.33	1.54	.130	.734
Error	307.78	1433	0.22			

Table 5

Descriptive Statistics for Closeness to Mother by Cohort and Ethnicity

Cohort	Ethnicity	*M*	SD	*N*
6	Hispanic	3.57	0.40	236
	Asian	3.52	0.45	11
	Pacific Islander	3.40	-	1
	Black	3.57	0.39	170
	White	3.73	0.38	89
	Other	3.64	0.38	57
9	Hispanic	3.44	0.45	213
	Asian	3.30	0.39	7
	Black	3.38	0.46	129
	White	3.44	0.45	65
	Native American	2.90	0.14	2
	Other	3.43	0.57	40
12	Hispanic	3.33	0.50	179
	Asian	3.40	0.34	5
	Black	3.25	0.54	130
	White	3.42	0.49	62
	Native American	4.00	0.00	2
	Other	3.23	0.58	53

Table 6

Pairwise Comparisons for Closeness to Mother Score by Cohort

(I) Cohort	(J) Cohort	Mean Difference (I-J)	SE	p	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
6	9	0.18*	0.03	.000	.12	.25
	12	0.29*	0.03	.000	.22	.36
9	6	-0.18*	0.03	.000	-.25	-.12
	12	0.10*	0.03	.003	.03	.18
12	6	-0.29*	0.03	.000	-.36	-.22
	9	-0.10*	0.03	.003	-.18	-.03

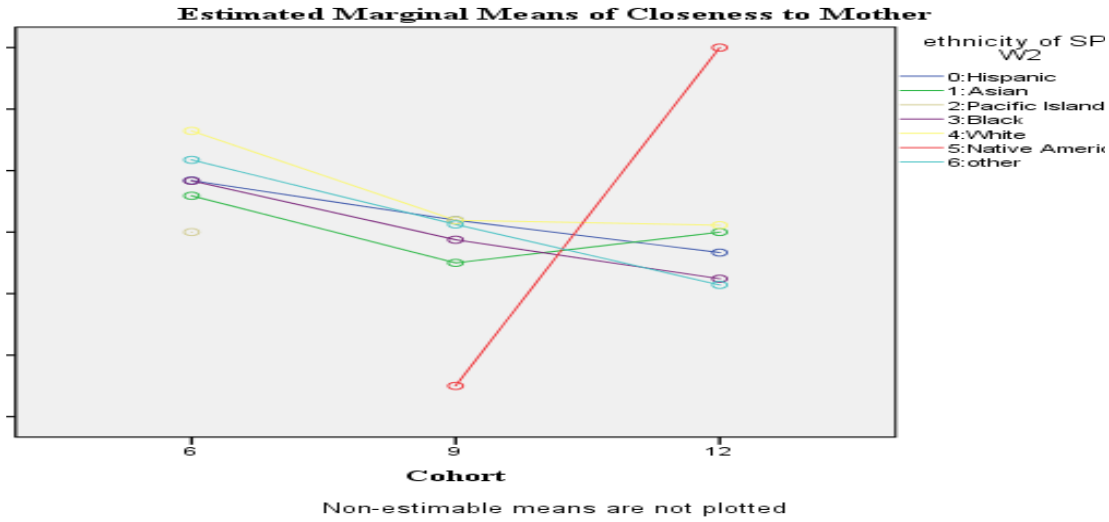

Figure 1. Estimated marginal means for closeness to mother scores.

RQ2: Are there differences in closeness to family members in single-parent families, related to race/ethnicity and cohort?

$H_0$2: There are no differences in closeness to family members in single-parent families, related to race/ethnicity and cohort.

H_A2: There are differences in closeness to family members in single-parent families, related to race/ethnicity and cohort.

To address Research Question 2, I conducted a factorial ANOVA to determine if

differences existed in closeness to family members in single-parent families related to ethnicity and cohort. Prior to conducting the analysis, I assessed the assumptions of normality and homogeneity of variance. The assumption of normality was assessed using the Kolmogorov-Smirnov test for normality. Normality was violated for closeness to mother ($p < .001$). The assumption of homogeneity of variance was assessed using the Levene's test. Homogeneity of variance was not violated ($p = .067$).

The results of the analysis reflected a statistically significant difference in closeness to family scores related by cohort and ethnicity, $F(12,1951) = 2.42$, $p = .004$. The statistically significant interaction effect indicated significantly different means existed in closeness to family scores across cohorts by ethnicity. The effect of cohort differed depending on the ethnicity of the child. White participants in Cohort 6 had higher closeness to family scores than the other ethnic groups included in the sample. This trend was not evident consistently across the cohorts as White participants in Cohort 15 had the lowest closeness to family scores in the sample (see Figure 2).

Results of the factorial ANOVA indicated that no statistically significant difference existed in closeness to family across ethnic groups, $F(6,1951) = 0.53$, $p = .783$. A statistically significant difference existed in closeness to family by cohort, $F(3,1951) = 4.99$, $p = .002$. Pairwise comparisons across cohorts revealed the source of the statistical significance. I found that the mean closeness to family scores were higher for the cohort of 6-year-old subjects than for the 9, 12, and 15-year-old cohort. Pairwise comparisons between the 9, 12, and 15-year-old cohorts were not statistically significant. Table 7 presents the results of the factorial ANOVA and Table 8 presents descriptive statistics for closeness to family scores by cohort and ethnicity.

Table 7

Results of the Factorial ANOVA for Cohort, Ethnicity, and Closeness to Family

Source	Type III Sum of Squares	df	Mean Square	*F*	*p*	Observed Power
Cohort	0.94	3	0.31	4.99	.002	.916
Ethnicity	0.20	6	0.03	0.53	.783	.218
Cohort*Ethnicity	1.82	12	0.15	2.42	.004	.971
Error	122.52	1951	0.06			

Table 8

Descriptive Statistics for Closeness to Family by Cohort and Ethnicity

Cohort	Ethnicity	*M*	SD	*N*
6	Hispanic	1.92	0.26	256
	Asian	1.95	0.15	11
	Pacific Islander	1.88	-	1
	Black	1.93	0.24	193
	White	2.00	0.20	88
	Other	1.95	0.23	60
9	Hispanic	1.91	0.25	221
	Asian	1.88	0.27	7
	Black	1.88	0.27	157
	White	1.90	0.19	68
	Native American	1.50	0.35	2
	Other	1.90	0.26	43
12	Hispanic	1.88	0.27	191
	Asian	1.78	0.27	5
	Black	1.86	0.28	148
	White	1.91	0.23	63
	Native American	2.00	0.00	2
	Other	1.88	0.27	56
	Total	1.88	0.26	465
15	Hispanic	1.9332	0.26	159
	Black	1.9062	0.24	128
	White	1.7971	0.26	69
	Other	1.8944	0.25	45

Table 9 presents the results of the pairwise comparisons for cohort and Figure 2 presents the estimated marginal means for closeness to family scores.

Table 9

Pairwise Comparisons for Closeness to Family by Cohort

(I) cohort	(J) cohort	Mean Difference (I-J)	SE	*p*	95% Confidence Interval Lower Bound	Upper Bound
6	9	0.05*	0.02	.012	.01	.09
	12	0.06*	0.02	.000	.02	.10
	15	0.04*	0.02	.031	.00	.09
9	6	-0.05*	0.02	.012	-.09	-.04
	12	0.02	0.02	.733	-.02	.06
	15	-0.00	0.02	.999	-.05	.04
12	6	-0.06*	0.02	.000	-.10	-.02
	9	-0.02	0.02	.733	-.06	.02
	15	-0.02	0.02	.687	-.06	.03
15	6	-0.04*	0.02	.031	-.09	-.00
	9	0.00	0.02	.999	-.04	.05
	12	0.00	0.02	.687	-.03	.06

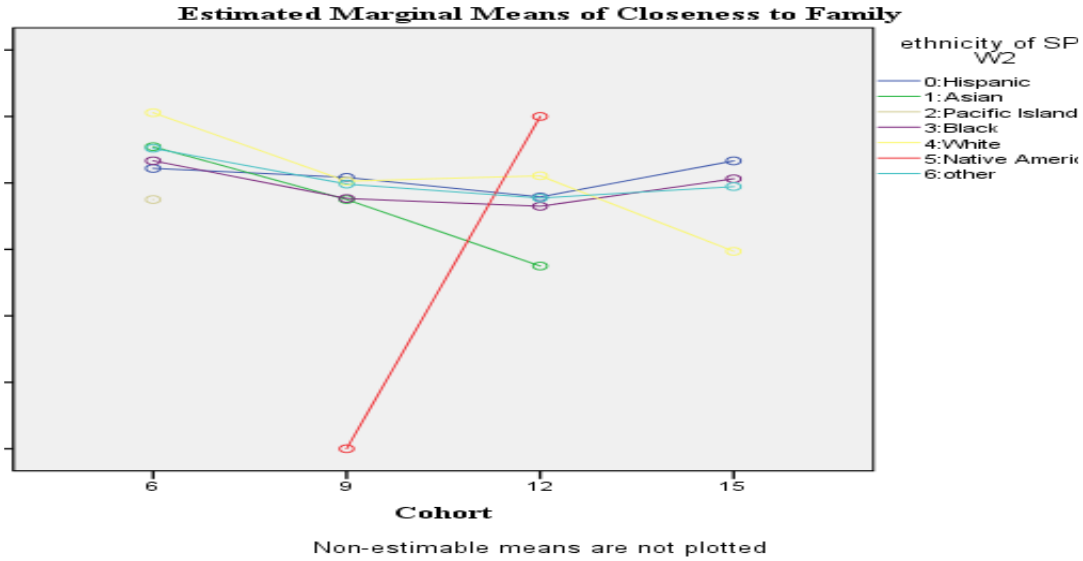

Figure 2. Estimated marginal means for closeness to family.

RQ3: Within single-parent families, are emotional outcomes for youth predicted by closeness to the mother and closeness to family members?

$H_0$3: Emotional outcomes for youth are not predicted by closeness to the mother and closeness to family members.

H_A3: Emotional outcomes for youth are predicted by closeness to the mother and closeness to family members.

For Research Question 3, I conducted a multiple linear regression analysis to assess whether a significant relationship existed between closeness to mother and closeness to family and emotional outcomes. I chose the 'Enter' variable selection method for the linear regression model, which forces all selected variables into the model. The assumption of normality was assessed using the Kolmogorov-Smirnov test. Results of the test indicated that the assumption of normality was not met for closeness to mother ($p < .001$), closeness to family $p < .001$), and emotional outcomes $p < .001$). Stevens (2009) suggested that with a sufficiently large sample size regression analysis may be robust to violation of normality. The assumption of homoscedasticity was assessed by plotting the model residuals against the predicted model values (Osborne & Walters, 2002). Because the points were not unevenly distributed and no curvature was apparent the assumption was met. Figure 2 presents a scatterplot of predicted values and model residuals. Variance Inflation Factors were calculated to detect the presence of multicollinearity between predictors. High VIFs indicate increased effects of multicollinearity in the model. Variance Inflation Factors higher than five are cause for concern, whereas a VIFs of 10 should be considered the maximum upper limit (Menard,

2009). All predictors in the regression model had VIFs less than 10. Table 8 presents the VIF for each predictor in the model.

The results of the linear regression model were significant, $F(2,1454) = 75.35$, $p < .001$, $R^2 = 0.09$, indicating that approximately 9% of the variance in emotional outcomes was explainable by closeness to mother and closeness to family. The null hypothesis was rejected stating that closeness to mother and family predicted emotional outcomes. However, the low R^2 indicated that the overall model was a poor fit for the prediction of emotional outcomes in participants. Closeness to mother was not a significant predictor of emotional outcomes, $B = 0.00$, $t(1454) = 0.12$, $p = 0.904$. Based on this sample and measurement for closeness to mother, a one unit increase of closeness to mother did not have a significant effect on emotional outcomes. Closeness to family significantly predicted emotional outcomes, $B = 0.45$, $t(1454) = 11.02$, $p < .001$. This indicated that on average, every one-unit increase of closeness to family results in a 0.45 unit change in emotional outcomes. Table 10 summarizes the results of the regression model.

Table 10

Results for Multiple Linear Regression with Closeness to Mother and Closeness to Family predicting Emotional Outcomes

Variable	*B*	*SE*	β	*t*	*p*	*VIF*
Closeness to Mother	0.00	0.02	0.00	0.12	.904	1.23
Closeness to Family	0.45	0.04	0.31	11.02	< .001	1.23

Note. $F(2,1454) = 75.35$, $p < .001$, $R^2 = 0.09$.

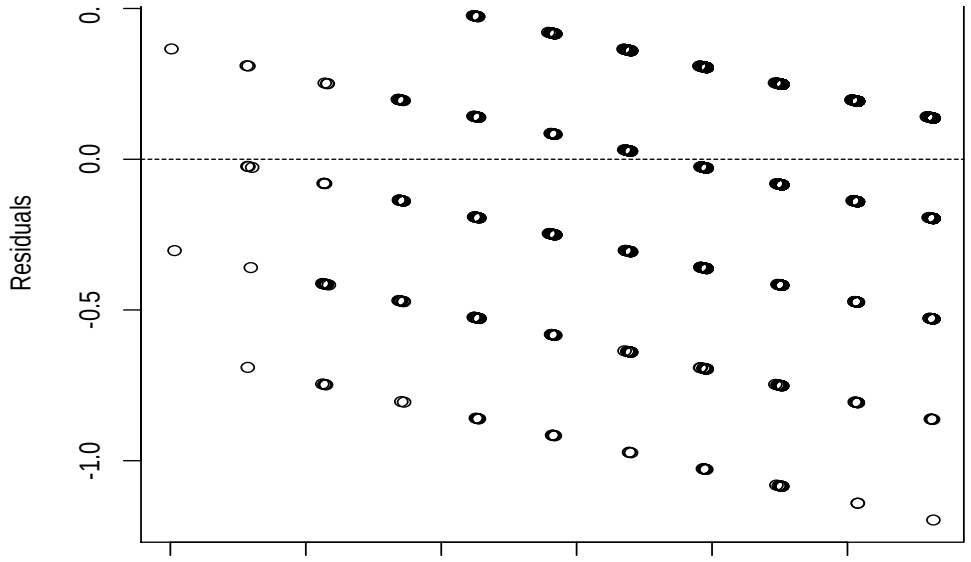

Figure 3. Residuals scatterplot for homoscedasticity for closeness to mother and closeness to family predicting emotional outcomes.

RQ4: Within single-parent families, is there a relationship between family interaction and social outcomes for youth?

$H_0$4: There is no relationship between family interaction and social outcomes for youth.

H_A4: There is a relationship between family interaction and social outcomes for youth.

For Research Question 4, I conducted a Pearson correlation analysis between family interaction and social outcomes. Cohen's standard was used to evaluate the strength of the relationship, where coefficients between .10 and .29 represented a small association, coefficients between .30 and .49 represented a moderate association, and coefficients above .50 indicated a large association (Cohen, 1988). A Pearson correlation

requires that the relationship between each pair of variables is linear (Conover & Iman, 1981). This assumption is violated if curvature exists among the points on the scatterplot between any pair of variables.

A significant positive correlation between family interaction and social outcomes ($r = 0.11$, $p < .001$). The correlation coefficient between family interaction and social outcomes was 0.11 which indicated a small relationship. This finding suggested that as family interaction scores increased, social outcomes tended to increase. However, the weak association measured may have been because of the large sample size included in the analysis ($N = 2001$). In examining the scatterplot, there was no discernable pattern assessed between social outcomes and family interactions. Figure 4 presents a scatterplot of the correlation.

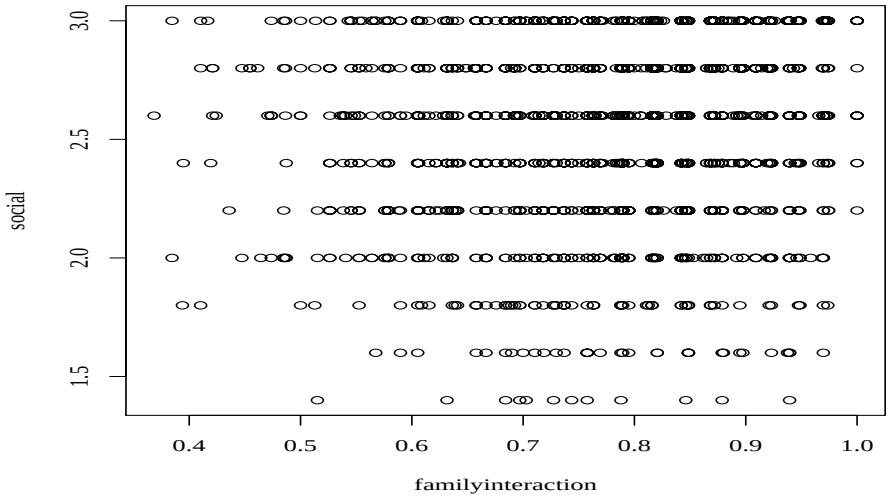

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Figure 4. Scatterplot between family interaction and social outcomes.

RQ5: Are there differences in family interaction (i.e., child-parent and child-other family members), related to race/ethnicity and cohort?

$H_0$5: There are no differences in family interaction (i.e., child-parent and child-other family members), related to race/ethnicity and cohort.

H_A5: There are differences in family interaction (i.e., child-parent and child-other family members), related to race/ethnicity and cohort.

To address Research Question 5, a factorial ANOVA was conducted to determine if differences existed in closeness to family in single-parent families related to ethnicity and cohort. Prior to conducting the analysis, I assessed the assumptions of normality and homogeneity of variance. I assessed the assumption of normality using the Kolmogorov-Smirnov test for normality. Normality was violated for closeness to mother ($p < .001$). I assessed the assumption of homogeneity of variance using the Levene's test. Homogeneity of variance was violated ($p < .001$).

The interaction effect between cohort and ethnicity on family interaction was not statistically significant, $F(18,3234) = 1.37$, $p = .137$. The results of the analysis reflected a statistically significant difference in family interaction scores related by ethnicity, $F(6,3234) = 22.49$, $p < .001$. A statistically significant difference existed in family interaction by cohort, $F(4,3234) = 4.33$, $p = .002$. Pairwise comparisons were conducted across cohorts to determine the source of the statistical significance. I found that the mean family interaction scores were higher for the cohort of 3-year-old subjects than for 15-year-old cohort. The mean family interaction scores were lower for the 3-year-old cohort than for the 6 and 9-year-old cohort. No statistically significant difference existed in mean family interaction scores between 3 and 12-year-old cohorts; 6 and 9-year-old

cohorts; and, 9 and 12-year-old cohorts. Family interaction scores were higher for the 6-year-old cohort than the 12 and 15-year-old cohorts. The mean family interaction score was higher for the 9-year-old cohort than the 15-year-old cohort. Family interaction scores were higher in the 12-year-old cohort than the 15-year-old cohort. I did not conduct pairwise comparisons between ethnic groups because of the unequal sizes among groups. Table 11 presents the results of the factorial ANOVA and Table 12 includes descriptive statistics for family interaction by cohort and ethnicity. Table 13 presents the results of the pairwise comparisons for cohort and Figure 5 presents the estimated marginal means for family interaction.

Table 11

Results of the Factorial ANOVA for Cohort, Ethnicity, and Family Interaction

Source	Type III Sum of Squares	df	Mean Square	*F*	*P*	Observed Power
Cohort	0.24	4	0.06	4.33	.002	.933
Ethnicity	1.90	6	0.32	22.49	.000	1.000
Cohort*Ethnicity	0.35	18	0.02	1.37	.137	.890
Error	45.50	3234	0.01			

Table 12

Descriptive Statistics for Family Interaction by Cohort and Ethnicity

Cohort	Ethnicity	*M*	SD	*N*
3	Hispanic	0.74	0.13	314
	Asian	0.74	0.15	6
	Black	0.75	0.14	241
	White	0.84	0.10	124
	Native American	0.89	-	1
	Other	0.79	0.13	103
6	Hispanic	0.79	0.12	319
	Asian	0.84	0.06	13
	Pacific Islander	0. 70	-	1
	Black	0.78	0.12	235
	White	0.87	0.10	114
	Other	0.82	0.12	79
9	Hispanic	0.78	0.12	279
	Asian	0.84	0.03	8
	Black	0.78	0.12	183
	White	0.82	0.11	84
	Native American	0.76	0.14	3
	Other	0.81	0.11	58
12	Hispanic	0.75	0.12	249
	Asian	0.77	0.13	6
	Black	0.78	0.11	197
	White	0.84	0.09	77
	Native American	0.68	0.19	2
	Other	0.80	0.10	70
15	Hispanic	0.72	0.12	203
	Asian	0.73	-	1
	Black	0.73	0.13	157
	White	0.76	0.12	80
	Other	0.75	0.12	56

Table 13

Pairwise Comparisons for Family Interaction by Cohort

(I) cohort	(J) cohort	Mean Difference (I-J)	SE	*p*	95% Confidence Interval Lower Bound	Upper Bound
6	9	0.05*	0.02	.012	.01	.09
	12	0.06*	0.02	.000	.02	.10
	15	0.04*	0.02	.031	.00	.09
9	6	-0.05*	0.02	.012	-.09	-.04
	12	0.02	0.02	.733	-.02	.06
	15	-0.00	0.02	.999	-.05	.04
12	6	-0.06*	0.02	.000	-.10	-.02
	9	-0.02	0.02	.733	-.06	.02
	15	-0.02	0.02	.687	-.06	.03
15	6	-0.04*	0.02	.031	-.09	-.00
	9	0.00	0.02	.999	-.04	.05
	12	0.00	0.02	.687	-.03	.06

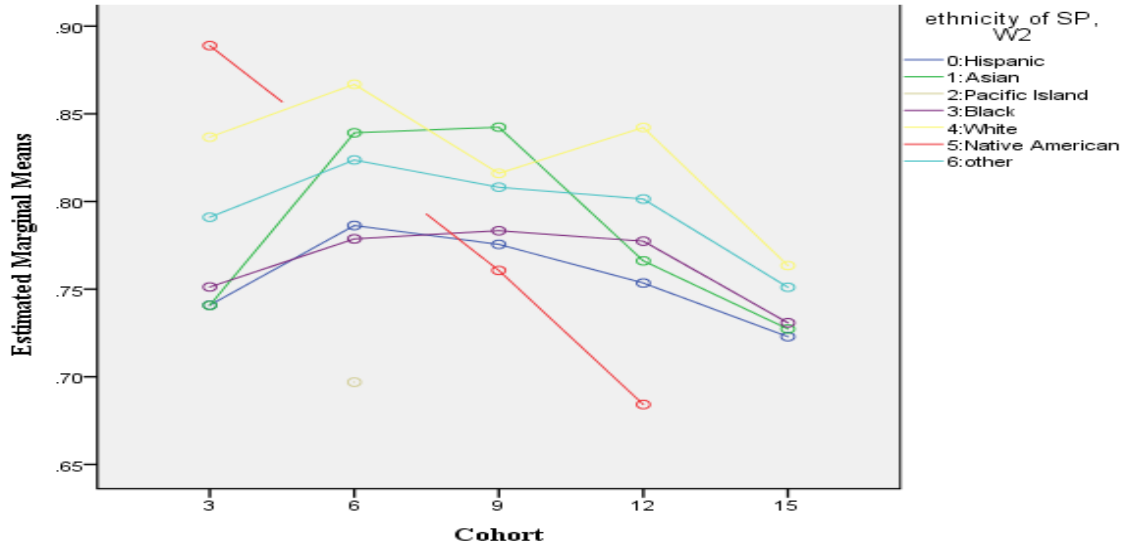

Figure 5. Estimated marginal means for family interaction.

Summary

The purpose of the current quantitative correlational study was to examine the relationship between ethnicity, parent-child relationship, family interaction, and youth development outcomes. I used factorial ANOVA, multiple regression analysis, and Pearson correlation analysis to investigate these relationships. For Research Question 1, I assessed differences in closeness to mother related to cohort $F(2,1433) = 15.48$, $p < .001$. However, I did not find statistically significantly differences based on ethnicity alone, or the interaction effect of cohort and ethnicity. For Researcher Question 2, I assessed statistically significant differences in closeness to family related to cohort and ethnicity, $F(12,1951) = 2.42$, $p = .004$, and related to cohort, $F(3,1951) = 4.99$, $p = .002$. No statistically significant difference existed in closeness to family related to ethnicity. For Research Question 3, I assessed a statistically significant predictive relationship among closeness to mother, closeness to family, and emotional outcomes, $F(2,1454) = 75.35$, $p < .001$, $R^2 = 0.09$. Closeness to family was a statistically significant predictor, $B = 0.45$, $t(1454) = 11.02$, $p < .001$. For Research Question 4, I assessed a statistically significant relationship between family interaction and social outcomes, $r = 0.11$, $p < .001$. For Research Question 5, I assessed a statistically significant difference in family interaction by ethnicity, $F(6,3234) = 22.49$, $p < .001$, and cohort, $F(4,3234) = 4.33$, $p = .002$. No statistically significant difference in family interaction because of the interaction effect of cohort and ethnicity.

Chapter 4 presented the results of the statistical analysis. I described the data collection and the demographic characteristics of the sample. The chapter provided a

detailed reporting of the results. Chapter 5 presents the findings of the study and implications for future research and practice.

CHAPTER 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative correlational study was to examine the relationship between ethnicity, parent-child relationship, family interaction, and developmental outcomes for youth living in families headed by single mothers. Families headed by single mothers have become one of the largest groups in a growing population of nontraditional families (Whitaker et al., 2014). In addition to the parent-child relationship, the relationship of important non-parental adults who provide crucial support to families and children, especially single-parent families, contributed to PYD (Bowers et al., 2014). Despite the known risk factors to youth development associated with families headed by single mothers such as delinquency, substance abuse, and early unprotected sex, research has also shown that youth from single-mother families function better than expected given their vulnerabilities (Taylor, 2010; Whitaker et al., 2014). Still, the positive dimensions of youth development among single-mother families remain underrepresented in the literature. Because of the increasing number of single-mother families and the influence of important non-parental adults in youth development (Bowers et al., 2014), it is important to identify connections between single-mother families, important non-parental adults, ethnicity, and PYD. Information from this study contributes to the scarce literature on the roles that single mothers and important non-parental adults play in the PYD of children living in single mother-headed families, as well as how these roles differ by ethnicity.

To assess the relationship between parent-child relationships, family interaction, non-parental adults and outcomes of youth, I used a correlational non-experimental

approach, and analyzed the data using the descriptive statistics method. The results of this study indicated no differences in closeness to mother in single-mother families, in relation to race. My analysis revealed a difference in closeness to family members across ethnic groups. The findings also showed that closeness to family positively correlated with emotional outcomes for youth, and a significant positive correlation existed between family interaction and social outcomes. In the next section, I interpret the findings of this study, address its limitations, make recommendations for future studies, and discuss its implications for social change.

Interpretation of the Findings

Hypothesis 1

The first research question was, "Are there differences in closeness to the mother in single-parent families related to ethnicity and age?" The findings led me to conclude that (a) no statistically significant differences existed in the closeness to mother for youth in single-mother families based on race alone, (b) no statistically significant differences was found in closeness to mother with age and race combined, and (c) a statistically significant difference existed in closeness to mother by age group. Pairwise comparisons across age groups revealed that closeness to mother scores were higher for younger children, and that mean scores for closeness to mother decreased as youth grew older. The findings indicate limitations in single-mothers' ability to maintain an appropriate level of hierarchical, authoritative relations with their children (Nixon et al., 2012), however, found that single-mothers' authority was not hierarchical but rather horizontal. For example, although single mothers kept child-parent boundaries clear and distinct, single-mothers and their children were interdependent and tended to negotiate household

responsibilities (Nixon et al., 2012). The clear majority of the research on the development of youth who grow up in single-parent households has limited the understanding regarding how single mothers mediate their relationships with their children, potentially replacing closeness with more structured parent-child relationships.

Dissimilarities existed regarding in how the questions for closeness to mother and closeness to family were measured by the PHDCN researchers. I assessed closeness to family using the Provisions of Social Relations Instrument which was designed to assess the support received by youth and their families. Respondents were asked to rate their primary source of help and their sense of closeness to family members. Statements such as "No matter what happens, I know my family will always be there for me should I need them" were recorded to assess closeness to family.

Closeness to mother was assessed by the PHDCN researchers using the Attitudes Toward Mother and Father Instrument which measured how the subjects (the children) felt about their mothers. Respondents for this instrument were read a series of statements relating to their mother and asked to judge how the statement applied. Statements included "I get along with my mother", "I can depend on my mother", and "my mother is very irritating." Table 3 presents that the means scores calculated; closeness to mother scores were very high compared to the means scores calculated for closeness to family. These instruments may not have been the best fit for comparing these variables.

Hypothesis 2

The second research question was, "Are there differences in closeness to family members in single-parent families?" Findings from this study led me to conclude that statistically significant differences existed in closeness to family members based on the

interaction of age and race. The results indicated that at younger ages (6 years old), White participants scored higher in closeness to family than the other ethnic groups. No statistically significant difference existed in closeness to family solely based on race, there was a significant difference in closeness to family across age groups by race. These results suggest that developmentally White children are closer to their families. Conversely, the findings also revealed that as youth from other ethnic groups get older, a reversal in this pattern occurs. Instead, youth scores for closeness to family began to trend higher at the age of 15 for African American, Hispanic, and other ethnic participants, while it trended down for White participants at the same age. This suggests closer family relationships for ethnic minority youth as they get older. These findings show that the predictor variable of age contributed to youth having closer relations with family at this particular age in their development. Figure 2 shows this trend, presented as estimated marginal means for closeness to family scores.

Historically, African American families headed by single-parents have been compared to White families in studies where researchers did not adequately consider the influence of cultural factors such as the extended family, which plays a crucial role in the rearing of children in African American families (Whitaker et al., 2014). Unlike Caucasian mothers, African American mothers welcome the support from extended networks. African Americans are more likely to view parenting as a task for the whole family, including extended kin and close non-relatives. African American mothers often rely on the support of their extended family and community to share in childrearing concerns (Lamborn & Nguyen, 2004; Taylor, 2010).

Researchers have well-documented generalized patterns in family research that do not apply within all family systems (Crosnoe & Cavanagh, 2010). My use of RDS theories allowed me to investigate the cultural perspectives associated with race among different family structures, and to separate traits by family structure (i.e., single-parent families vs two-parent families). Researchers often referenced focusing on race and family attributes in the literature as the context in which family processes need to be explored (Evans et al., 2012).

Hypothesis 3

The third research question was, "Within single-parent families, are emotional outcomes for youth predicted by closeness to the mother and closeness to family members?" The findings from this study led me to conclude that a statistically significant predictive relationship existed among closeness to mother, closeness to family, and emotional competence. Correlations between these variables were analyzed using multiple regression analysis. The results of the linear regression were significant. The findings showed that closeness to family positively correlated with emotional outcomes for youth. Therefore, I rejected the null hypothesis, emotional outcomes for youth are not predicted by closeness to the mother and closeness to family. These findings underscore the importance of non-parental adults as a key factor in promoting PYD (Bowers et al., 2014). Parents as well as important non-parental adults play important roles in promoting positive development in children and youth. Bowers et al., 2014). Non-parental relationships have been linked to a range of psychological, socioemotional, and behavioral outcomes (Bowers et al. 2012; Zimmerman et al. 2002). These findings support and extend knowledge of this discipline by highlighting the importance of

childhood relationships with parents and other important non-parental adults which have been linked to emotional well-being later in life (Mallers et al., 2010). Theoretically, this incorporates the RDST meta- model; emphasizing the interplay between the person and the context for predicting an outcome (Geldhof et al., 2014).

Hypothesis 4

The fourth research question was, "Within single-parent families, is there a relationship between family interaction and social outcomes for youth?" I conducted a Pearson correlation analysis between family interaction and social competence. The finding from this analysis concluded that a significant relationship existed between family interaction and social outcomes. I used Cohen's standard to analyze the strength of the relationship, indicating a small significant positive relationship between family interaction and social competence for youth. Though the association was weak, it indicated that as family interaction increases, social competences tended to increase. This study expanded the literature on PYD and African American youth by moving it in the direction of explaining why family processes, such as spending time together eating dinner or taking a walk matter to different family systems (Crosnoe & Cavanagh, 2010).

Like Bronfenbrenner's (1986) ecology theory, RDS supports this finding because it focuses on the interaction between relationships (microsystems) that create resiliency and positive outcomes (meso-systems). The relational developmental systems metatheory can be adapted for continuing emotional, cognitive, and social development. For example, micro-ecosystem relationships affect the individual directly on a day-to-day basis. Accordingly, contemporary family researchers have agreed that explaining why family processes matter and being able to connect different process within family systems

is more beneficial for understanding diverse families than merely identifying general patterns (Crosnoe, & Cavanagh, 2010).

Hypothesis 5

The fifth research question was, "Are there differences in family interaction and race?" The findings for this factorial ANOVA indicated that no statistically significant interaction effect occurred in family interaction by race and by age group, respectively. A significant difference occurred in family interaction by race and by age group, respectively. I conducted pairwise comparisons were conducted across the age groups to determine the source of the relationship. I found that younger children encounter more family interaction than older children do. Because of unequal ethnic group size, no pairwise comparisons was conducted. The findings show that family interaction is an important aspect of rearing and proves important for youth development. McDonald et al. (2011) also provided evidence of the strengths that existed in non-traditional families that produced PYD, suggesting that family functioning was one of the strongest influences on PYD in the context of community violence exposure.

The findings also fit major propositions and assumptions of RDS metatheory relating to youth development. A positive development trajectory is possible with nurturing environments and enriching relationships and youth benefit from these supportive relationships, as well as from strategies promoting supportive engagement (Scales et al., 2000).

Implications

The adaptability of the RDS framework allowed for variations in methodology, study design, measurement, sampling, and data analysis techniques for this study. I

selected the statistical approaches used for this study to describe quantitative associations between the subject, family relations and development trajectories. The RDS approach used the statistical concept of interaction to imply a quantitative association between variables for this study. The analyses used helped to explain how each difference contributes to the variation in observable characteristics, such as the finding that as closeness to family members increases, social competences also increases, providing further explanation regarding how much of a child's developmental trajectories are attributed to relationships to their environments (Griffiths & Tabery, 2013).

The RDS research focused on explaining the connections between the individual and their environment (Overton, 2011) and is driven by the significance of diversity (Lerner et al., 2013). I explicitly identified the most robust factors that have conceptually and empirically shown to be essential for PYD across cultures. Future frameworks on PYD in the African American culture should include the role of resilience as a part of the theoretical discussion of understanding how single-parent families overcome hardships with the supportive relationships of other important non-parental adults and the effect of these components on positive youth outcomes. Since conceptual factors like the family and relationships contribute to resilience (Moilanen et al., 2009), variables, such as, a close relationship with a caring parent, socioeconomic advantage, and a supportive network are factors shown to contribute to resilience.

If protective factors can reduce disruptions to parenting experienced by single mothers, then interventions may provide evidence to positively influence parenting behaviors, improving support and involvement for the children, helping to prevent social and emotional problems for the children (Clement, 2011) who experience diminished

parenting most often evident in single-parent families. Because of the experiences of African American single mothers having been underrepresented by previous studies, making sense of all the inconsistencies of past studies on strengths and assets in ethnic minority families can be tremendous considering the variations that exist in samples, outcomes, and methods of analysis. Research on PYD within the context of single-parent families is in its beginning stages. Although new research is emerging on this topic, many unanswered questions remain regarding family strengths that promote PYD and the role of non-parental adults.

Limitations of the Study

Adequate sampling size existed to consider the evidence from this study to provide relevance to single-mothers of all ethnicities outside of the context of this study. This study involved a large sample-size representative of the African American single-mother family population. There were 4434 entries, though not every entry made it into each analysis. The study was limited in comparable data for mothers who were married. Within this secondary sample, marital status fluctuated throughout the duration of the study which made is difficult to compare subjects from single-parent families with subjects from intact (two-parent) families. Identifying single-parent families from different localities would provide a more representative population and allow for enhanced generalization and greater statistical power in future studies.

Because ethnicity and group sizes varied between Hispanic N= 1,766, African American N=1,305, White American N=652, Asian N=49, Native American N=9, in the future, equal representations need to exist so that more sound comparisons can be made

across ethnic groups. This difference in size could be driving statistically significant results, which cannot be verified unless comparable group sizes exist.

Potential concerns with the constructs included whether the instruments used in the PHDCN study appeared to measure what they were supposed to measure. However, some of the scales were not the best instruments for measuring the variables in the present study. Future researchers analyzing positive development in single-parent families should focus on using valid models that predict developmental outcomes across cultures.

The emotional outcomes were not able to be accesses as planned because of insufficient data to conduct a regression analysis with closeness to family and closeness to mother as the predictors. Because the data were not present to support this analysis, I used items related to emotional outcomes from another instrument to calculate the emotional outcomes variable.

Recommendations

One of the strengths of conducting analyses with secondary data is the advantage of utilizing groups already in existence. The drawback of using existing data is the threat that comes with using instruments that may not address the same constructs. One suggestion for future studies would be the development of instruments more closely relate to the variables closeness to mother and closeness to family members as they relate to developmental outcomes. Future researchers should focus on families where the primary care giver remained single, widowed or divorced throughout the child's youth and up to a specific age group.

I also found, in the literature that researchers studying PYD failed to report on the role of race and ethnicity in positive youth outcomes in African American families (Evans et al., 2012). As researchers, have called for the separation of ethnicity from other contextual variables for a better understanding of youth from African American single-mother homes, few researchers have followed through on this goal (Goodrum, Jones, Kincaid, Cuellar, & Parent, 2012; Pinderhughes & Lee, 2008). Additional research on cross-contextual influences, such as parent-child relationships and family-child relationships has produced significant findings pertaining to the benefits of PYD. Future studies could add valuable research regarding how such influences affect youth and individual-context relations. In this study, I found that non-parental adults play an integral role in a child's support and development. These adults include aunts, uncles, grandparents, coaches, teachers, and neighbors. Future researchers should explore the effect of these non-parental adults by category on children development by age group. Researchers should begin to highlight which important non-parental adult has the most influence on developmental outcomes.

The difficulty in making sense of all the inconsistencies of past studies on families and youth development can be challenging when considering which direction to pursue future research in this discipline. I recommended that future researchers identify connections between PYD and single-mother headed households across cultural influences that will provide opportunities to determine targets for intervention and prevention in single-parent families. Ultimately this will help single mothers engage in PYD for future generations to come.

Implications for Positive Social Change

This strength-based study can be valuable to the body of knowledge pertaining to family science. Providing promising information about the potential for successful relationships with family members and important non-parental adults can help transition youth into adulthood despite the adversities from a single-parenting home. Public health researchers and social scientists are particularly interested in the positive aspects of adolescent development because adolescence is a critical developmental stage (Masten, Obradović, &Burt, 2006). The behavior of individuals during this stage can have important consequences for their development as emerging adults. At the age of 18, American youth are given legal status and are expected to have greater responsibility for their behavior as emerging adults. For many individuals, particularly those who have grown up in high-risk families, development is already not going well. Many of these individuals have not mastered multiple competence tasks required by society (Roisman, et al., 2004).

In this study, a potential risk to youth as they are approaching young adulthood revealed a declining trend of time spent by youth interacting with the family. As children get older, they become less involved with socializing with the family. Consequently, young people spend more and more time with their peers which increases the chances for misconduct and delinquent behavior. The reduction in family interaction was shown to be a contributor to the lack of social competence seen demonstrated by many young people. Studies like this one may be of interest to researchers and society because the results provide essential information about the benefits of family assets. Information from this

study may help to improve young peoples' chances of succeeding by understanding how successful transitions to adulthood occur and establishing what makes a difference for youth heading in the direction of adulthood. This information can be used in altering the life course of many emerging adults from single-parent families.

Conclusion

In this study, I examined the relationships that help to build strong families and produce positive outcomes for children who are most affected by risks associated with being in a nontraditional family structure. This project was unique because I addressed the family as the primary environment surrounding youth, focusing on attributes of family strength that have often gone unrepresented in research on PYD (Evans, et al., 2012; Thomas, & Joseph, 2013). The findings of this study add to the gap in literature regarding the connections between single-mother families, ethnicity, and PYD.

My intent to expand research to reflect ethnic populations and different positive developmental factors should be the intent of other studies in the future. Overall, the results of this study suggest that some significant correlations exist between race, ethnicity and Family Relations on the Developmental Outcomes of Youth Raised in Single Mother Headed Households. Positive youth development and parenting by single-mothers are positively linked by how important non-parental adults support single-mother families. This study confirmed that the level of support a child receives and the level of nurturance and affection received by parents or non-parent can be predictors of well-being in later life (Mallers et al., 2010). Through the experiences surveyed by the participants of this study, researchers and practitioners need to gleam the positive of successful single mothers and draw attention to the unique attributes of strong families

headed by single mothers from all ethnic backgrounds to positively guide the direction of the future of those youths living in these families.

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Appendix A

Attitudes Toward Mother and Father http://doi.org/10.3886/ICPSR13676.v1The Attitudes Toward Mother and Father instrument was administered to collect information regarding the subject's relationship to the subject's mother and father. The subjects were read statements and asked to judge how often each statement applied to them; statements such as "I get along well with my mother", "My mother is very irritating", and "I can really depend on my mother".

Home Observation for Measurement of the Environment
http://doi.org/10.3886/ICPSR13594.v1

The HOME instrument explored how the home environment met youth's needs and contains age appropriate questions designed to observe the development appropriateness of the environment for the subject. As well as the subjects positive and negative interactions between the subject and the primary caregiver.

Home and Life Interview http://doi.org/10.3886/ICPSR13716.v1

The Home and Life Interview instrument was a restructured version of the HOME inventory which was used to evaluate aspects of the subject's developmental environment that could affect future positive or negative social behaviors.

Provision of Social Relations (Subject and Young Adult)
http://doi.org/10.3886/ICPSR13734.v1

The Provision of Social Relations Instrument was created to assess the social support that subjects received from friends and family. Questions include items such as "people who know me trust me and respect me" and "I know my family will always stand by me".

Demographic File http://doi.org/10.3886/ICPSR13581.v1

The data files contain information from the Demographic File include the primary caregiver's education, employment, income, welfare status, and material hardship. The files also contain information concerning the ethnicity of the subject and the primary caregiver, the primary caregiver's marital status, the ethnicity of the primary caregiver's partner, and ethnicity of the subject's birth father and birth mother. There are also variables relating to the primary caregiver's partner's employment and income.